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## BUSINESS AND THE TARIFF.

THE tariff question again has been brought prominently to public notice through the calling of an extraordinary session of the United States congress for its consideration. The last general election revealed a popular demand for a revision of the existing schedules, but not to the extent of showing just what was wanted. President Taft deserves commendation for the promptness with which he has moved to bring the question to a head, and it is no less commendable that the opposing parties which make up the membership of the national legislature have agreed to sink partisan differences on other scores, in order to get out of the way as speedily as possible the obstacle to business activity which pending tariff legislation always causes.

Even if no change in principle is involved, it becomes necessary now and then to revise tariff schedules, and the last revision dates back twelve years. But apart from this, the business depression which has been experienced throughout the world for more than a year past has affected governmental no less than personal or corporation revenues, and a deficit in the national treasury needs to be provided against. As President Taft has pointed out, if the new tariff schedules should not provide enough revenue for the near future, the congress faces the neces-

sity of devising extraordinary sources of income for possible requirements of the government.

The new tariff bill which has been introduced at Washington appears in no wise to differ in principle from the existing statute, and only time can tell what may be the effect, either upon revenues or upon general business, of such changes from the schedules of 1897 as the congress may approve. But whatever form the new tariff law may take, business is certain to be retarded while the legislators are in session, and the whole industrial and commercial world will welcome the earliest possible completion of their task.

One encouraging fact is that tariff schedules and regulations are getting to be regarded as of less vital importance than formerly, when, in political contests, no other question was so much dwelt upon by rival party workers. The rubber industry certainly is an important one, but we have seen, during the four months of hearings on the tariff schedules, preliminary to the congress session, almost no evidence of interest in the subject on the part of the leading rubber men. They cannot fail to be affected, however, by anything which may lead to a suspension of the building for the future which is essential to prosperity in any nation. Ultimately we may expect to see people generally cease to regard the tariff question as the one great factor in national prosperity.

Apart from the temporary obstacle to business pointed out here, the outlook is good. For that matter, it always is good for whoever can look ahead. The world advances nowadays more rapidly than in earlier times, but the various elements of growth do not always keep the same pace, so that occasional readjustments become necessary. Such a readjustment has been in progress of late—not for the United States alone, but for the civilized world—and an item of the readjustment is modifying the American tariff schedules. But it is only a fly on the cartwheel which represents the world's commercial progress. The cartwheel itself is all right.

## THE GREATER TIRE TROUBLES.

THERE are other tire troubles than those which take tires to the repair shop. Some of these are dealt with in detail elsewhere in this issue. Take the matter of patents. A patents a tire and B makes the tire and C buys and uses it. Somebody goes into court with a disputed question regarding the patent, and neither A, B, nor C knows "where he is at" until—not one decision, but—many decisions have been rendered. Didn't the Dunlop company establish the validity of their patent in the British house of lords, the final court of appeals in that country? Yet in one year thereafter the Dunlop company were a party to not less than 162 legal actions in respect of alleged infringements. On the day of its expiration the company gleefully burned the troublesome patent, their chairman declaring his pleasure at the end of the troubles it had caused, since which time they have

prospered without so-called patent "protection." But the Dunlop tire company were not the only people concerned. The hotly contested litigation over their tire is recognized as having led to the rewriting of British patent law, on account of the many new points raised by eminent opposing counsel in the suits referred to.

No less has the noiseless, smooth running, resilient rubber tire affected patent litigation in America, though in a different way. At least there is pending at Washington a bill, likely to be passed, to reform the practice in the courts having jurisdiction in patent cases. To relieve the United States supreme court of the interminable mass of litigation over patents and some other things, courts of appeals were established in different parts of the country for reviewing cases in which the inferior federal courts had original jurisdiction. In other classes of litigation the new system has worked satisfactorily, but not in the matter of patents.

In the case of an American tire which attained popularity the owners of the patent brought action against alleged infringers in the federal courts of first instance in more than one "circuit," and with varying results. The patent would be declared valid by the court of appeals of one circuit and not in another. It would appear that now anyone can manufacture the tire in a circuit where the patent was held invalid and send his goods into all of the other circuits. Even if the United States supreme court should take up the case and declare the patent valid, an infringer who won in a single circuit where the patent was declared invalid may still send his goods all over the United States as if he were a licensee under the patent. As we have said, the localized federal courts have worked successfully otherwise, as usually cases come before them involving questions between two individuals or corporations with purely local interests. But patent rights extend all over the country, with the continual possibility of such trouble as has been pointed out in the case of a certain tire, and it appears that a special Court of Patent Appeals, with jurisdiction throughout the United States, is to be the result.

But patent troubles do not end the list. The importer at New York of an automobile and of four unmounted tires of the proper size for it protested against paying duties on the tires as "automobile parts" on the ground that they were "manufactures of india-rubber," on which the tariff is lower. (1) The port collector insisted that the whole importation constituted one complete automobile, and was dutiable as such. (2) The customs appraisers, appealed to, supported the collector. (3) The local federal court took a different view. (4) The court of appeals for such cases provided reversed the lower court, one judge of the three dissenting.

For the time being it is law that whoever imports an untired automobile, but in the same invoice receives four tires adapted to that automobile, must pay duty on one complete machine, even though the whole had never been assembled before shipment. This is law at New York, at

least, but suppose the importation should be at Boston, or Savannah, or San Francisco, then there would have to be new decisions; they are in different federal court jurisdictions. Of course, the matter might be carried to the United States supreme court, whose jurisdiction would apply alike all over the land, but this is only prolonging trouble.

It will not be disputed, we believe, that there are serious tire troubles beyond punctures and blow-outs.

#### PLANTATION RUBBER CONDITIONS.

THE system of selling plantation rubber ahead under contract, which was introduced in Ceylon last year, proved so satisfactory that no fewer than sixteen planting companies are reported to have contracted to deliver their 1909 product of rubber to local merchants at a fixed price. The planter therefore need have no concern about fluctuations in the market for a year to come; it is only necessary to deliver his rubber to responsible houses, who undertake to pay a stipulated price without regard to London or New York market conditions. The fact that such a system obtains is evidence that rubber cultivation is regarded in the Far East as having reached a firm stage. The producer knows in advance about what his rubber will cost him, and the buyer trusts his own judgment as to the market for a year to come. It is worth while to note that the contract price for plantation rubber (exclusive of scrap) laid down at Colombo is equivalent to \$1.20, gold, per pound. This is about the prevailing price for new Islands fine Pará, and it may be inferred that the Colombo merchants count on something like \$1.30 as the ruling London price for plantation grades.

The total exports of plantation rubber from Ceylon and Malaya during 1908 appear to have reached 4,583,560 pounds, or 2,078 metric tons, and all indications point to a much larger production this year. It is scarcely more than a year since a gentleman widely regarded as an authority on rubber from every standpoint, writing on the subject at the invitation of a leading American magazine, fixed about 100 tons as the productive capacity of the Eastern plantations. This gentleman, by the way, is now busy reforming the city charter of New York, with a view to fitting it for future needs, and it is to be hoped that he will be more successful in forecasting municipal conditions than in the case of his rubber estimates.

All the large rubber planting companies may not show profits for the last business year comparable with some former periods. This is due to the fact that the rubber collected is not always sold within the business year during which it is produced. The reports for the past year, therefore, are based in part upon sales during the period of financial depression, while rubber produced later, and sold at much better prices, did not yield an income in time to be included in last year's reports.

THE FACT THAT CEYLON RUBBER PLANTERS are able to sell their crops to home merchants a year ahead at fixed prices puts them on a better plane than any agricultural interest elsewhere known to us.

SOME ENGLISHMEN HAVE INVESTED in a company to plant rubber in Florida, in the United States. But many Englishmen have become so enthusiastic over rubber that we should not be surprised to hear of their going in for plantations on the moon.

ONE INDICATION THAT UNCLE SAM is not so badly off financially just now is the fact that during the recent deliberations of the committee framing a new revenue bill no suggestion has been heard that an import duty might be placed on crude rubber.

THE HIGHER PRICES OF CRUDE RUBBER than prevailed during the last year may reasonably be regarded as pointing to a larger consumption, which is another way of saying that the condition of the industry on the whole is improving.

AUTOMOBILES FIGURE IN THE NEW AMERICAN TARIFF BILL, though they did not in the law enacted twelve years ago, which is only one illustration of why tariff schedules, if there must be tariff schedules, need to be revised now and then to keep them up to date.

WHILE THE BRITISH COLONIES IN THE EAST have taken the lead in rubber planting, it will require strenuous efforts to prevent the later enterprise of other countries from securing the position they now hold. As will be seen elsewhere in this paper, rubber is being planted in the colonies of the other European powers under conditions which promise important results.

THE PAST WINTER HAS SHOWN that early snows are not essential to the sale of rubber footwear. So long as there is any snow at all "rubbers" will be in demand, which shows what advance we have made since the time when it was regarded as an axiom that the absence of snow before New Year's spelled disaster to the rubber trade.

PARA, IN ADDITION TO SELLING RUBBER, also buys rubber, in spite of itself. At least all the recent public improvements made there, by foreign enterprise, by the way, involved the use in some shape of india-rubber.

IN SPITE OF THE PROGRESS OF WIRELESS TELEGRAPHY the building of ocean cables goes on at a rate which emphasizes the certainty that the native resources of gutta-percha are nearing exhaustion, when rubber must be substituted for insulation work in this field.

THE IMMINENT EXHAUSTION OF THE GUAYULE RUBBER SUPPLY causes no perturbation in Mexico. From the rate that new plants supposed to contain rubber are being discovered in that republic, it would seem that Mexico may long afford a field for the investment of outside capital that is not attracted by her mines of silver and gold.

TWO YEARS FROM NOW IS EARLY ENOUGH for the next international rubber exhibition which it is proposed to hold in London. The idea of holding the exhibiton is to be commended, however, and without doubt 1911 will witness an advance in rubber cultivation, and in other departments of the exhibiton, that will mark a great advance over the conditions which made the Olympia affair of last September such a success.

THE REPORTED OBJECTION OF SOME of the rubber manufacturing companies to their employes taking "an active part in politics"

presumably is not directed against the men voting, but against their seeking public office, and, if successful at the polls, filling the same while still on the factory pay rolls. But the fact that any of the companies have felt obliged to take such action is evidence that they have numbered among their employes some good citizens.

THE GROWTH OF THE UNITED STATES is illustrated, in a way, by the story printed on another page of the founding of a great Scottish india-rubber factory. The home field was supposed then to be overcrowded, and surplus capital went abroad to find a field for profitable investment. That condition exists no longer, but the United States have been obliged to borrow enormous sums from Europe for the development of opportunities on this side of the Atlantic.

IT IS NOT SO MANY YEARS SINCE an importer of India-rubber in New York was reported to have bought from a truckman from time to time some of his own stock, which his employe had thriftily abstracted from the firm's warehouse to his own ultimate large advantage. Ever since rubber began to be a high priced commodity the stealing of it has been an annoyance to be guarded against seriously. The proposition of the India-Rubber Manufacturers' Association of England that plantation rubber should be trade marked with officially registered brands seems to have merit apart from the idea of the author of the suggestion. That is to say, the advantage to the manufacturer of being able to buy raw material by brand is supplemented by the ability of manufacturers and dealers in raw rubbers to identify particular lots to an extent not possible before rubber began to be designated so definitely.

#### THE GUAYULE RUBBER INTEREST.

LUTHER BURBANK, described as "the plant wizard of California," was mentioned in the *Torreón Enterprise* of recent date as being then on the Hacienda de la Peña for the purpose of experimenting with Mexican plants. He is reported to be interested particularly in guayule. The *Enterprise* says: "Mr. Burbank is trying to find a way of making the shrub grow plentifully, and has planted several sections of ground with the guayule, trying different soil and moisture on the plants."

The new guayule rubber factory of the *Compañía Guayulera de Torreón, S. A.*, [see *THE INDIA RUBBER WORLD*, March 1, 1909, page 214] was inaugurated on March 1. A number of guests from Torreón and Gomez Palacio went over on a special train and were shown through the works, after which a banquet was served. The ceremonies were presided over by a representative of the governor of the State.

A press dispatch from Torreón, Mexico, dated March 11, says: "Japanese agents are here in competition with Americans buying up the rubber produced from the guayule plant, and are in most cases paying the best prices and getting most of the product."

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IT would be interesting to know whether the approval of Scotland Yard has been asked for the employment of the Kempshall Pneumatic Tyre on public motor vehicles, and, if so, with what result.—*The Financial News*, London, March 5, 1909.

THE American Association of Commerce and Trade of Berlin, founded in 1903 and composed of German and American business firms, with the purpose of promoting trade relations between the two countries, in its latest Bulletin reports a successful past year with promising prospects for the current year. The secretary of the association and chairman of the editorial committee, Professor George S. Atwood, of Berlin, is widely known in the rubber trade, and has been a frequent contributor to *THE INDIA RUBBER WORLD*.



### A PROPOSED SPECIAL PATENT COURT.

THERE is a bill before the Congress at Washington for the establishment of a United States Court of Patent Appeals, which in a measure carries out a suggestion of the American Bar Association, approved by a number of other bodies representative of the legal profession. The keynote of the Bar Association's recommendation was: "A United States patent ought to have the same legal force and meaning everywhere within its borders. But it has not at the present time."

At the beginning the Circuit courts of the United States had original jurisdiction and the Supreme court appellate jurisdiction in all patent litigation. During the century while this system prevailed the reports of the supreme court contained a body of law—consistent, coherent, voluminous and wise—the result of a large number of cases which arose in interpreting the statutes and creating a vast number of rules of law outside the statute which constitute the great body of the patent law down to 1891. The system was eminently satisfactory in every respect except on account of the delays incident to the decision by the supreme court of so many appeals as began in time to reach it in patent cases.

To relieve the supreme court, which by the year 1891 was three to four years behind its docket, the congress created the circuit court of appeals, with final jurisdiction in patent cases, reserving to the supreme court only the right of review in case that body regarded it necessary, and the circuit court of appeals was divided into nine circuits to correspond with the divisions of the United States circuit court. In other words, the law created nine courts of last resort for patent cases, all of equal dignity, none of them bound by the decision of the others, located in nine different parts of the country, and exposed to all the elements calculated to rob their decisions of uniformity.

About the best concrete example which illustrates the conflict which exists between circuit courts of appeal will be found in the suit brought for infringement by the owners of the A. W. Grant patent for a solid rubber tire for carriage wheels—a matter which has been reported at much length in THE INDIA RUBBER WORLD. The patentee brought many suits for alleged infringement, with varying results, so that to-day the Grant patent is invalid in certain appellate court jurisdictions and valid in others, and one petition to the United States supreme court for *certiorari* in connection with the Grant cases was denied.

It is pointed out with great clearness, in the report of the house committee on the judiciary which recommends the passage of the bill now before congress, how the present system may rob the holder of any patent of any sort of protection if once litigation arises over it, and the same document shows also how large a percentage of the litigation before the federal courts relates to patents.

The salient features of the proposed new law are that the president of the United States shall appoint as chief justice of the new court a judge of one of the circuit courts or district courts, and that such chief justice shall designate four other judges of circuit or district courts to be associated with him, and four of the five judges so named shall form a quorum. The United States court of patent appeals shall have jurisdiction in the case of appeals and writs of error from decrees in the circuit courts, and the decisions of the new courts shall be final, except that it shall be competent for the supreme court to require any case to be certified to it for its review, the same as if the matter had been carried from the trial court directly to the supreme court.

The merit claimed for the new system is that not only will one decision prevail throughout the United States as regards the validity of a given patent, but a great saving of time and expense will result from confining to one court the attention to details which under the existing system might come before an indefinite number of courts of equal rank and dignity.

In support of the plan for drawing the members of the new court from the existing federal courts, it is urged that the judges of these courts are selected by the President from the bar as men of attained experience and reputation, who enjoy the confidence of the public for ability and integrity. These men, after service upon the circuit or district bench for a number of years, a part of which service involves the trial of patent cases in the first instance, are developed to a high standard of judicial attainment, and their decisions indicate very clearly to the bench and the bar which of them have any aptitude for the handling of patent cases. [For an earlier article on this subject see THE INDIA RUBBER WORLD, November 1, 1907—page 34.]

### WORK OF THE PATENT OFFICE.

THE number of patents granted by the United States during the calendar year 1908 was less than for the preceding year, which may or may not have been due to the financial depression which prevailed. Even in the most prosperous times every inventor does not find it an easy matter to find the cash for patent office fees. The number was greater, however, than in any preceding year, with the exception of 1907. The number granted during 1908 was 32,757, but as the same year witnessed the expiration of 22,328 patents, the net addition to the number of effective patents was only 10,419. These figures do not include design patents, reissues, or trade marks. The total number of patents granted by the United States to the end of last year was 918,392. The number granted by other countries (the figures for 1908 being partially estimated) was 1,952,086, making a total for all countries of 2,870,478, a vast proportion of which must be taken account of in deciding whether inventions for which patents are desired possess any novelty. The United States patent office has been reorganized of late, with an increased force, and has caught up with its work so as to make it possible to pass on the average application within from 30 to 60 days. The patent office is entirely self-supporting; indeed the surplus receipts over expenditures amounts to date to \$6,890,725.89. The commissioner of patents suggests to Congress that in view of this surplus the patent office should have a building of its own, better adapted to its work, as is the case in Great Britain and Germany.

### RUBBER AT THE KEW GARDENS.

THE collections at the Royal Botanic Gardens at Kew were largely enriched, after the International Rubber Exhibition at Olympia, by presents from various exhibitors of living plants, particularly of the least common rubber yielding species; stems of other plants, some illustrating methods of tapping; herbarium specimens, samples of rubber products, and photographs illustrative of rubber culture and of the preparation of rubber both in forests and on plantations. Mr. Ed. Maurer, of New York, is credited with guayule plants and samples of raw and manufactured guayule rubber. Various presentations also recently made to the museums at Kew were from Mr. F. H. Hunicke, of New York, including specimens to show the method of preparing rubber from *Landolphia Thollonii* in the Congo Free State. The authorities at Kew are not only diligent in making their collections as complete as possible, but they are all the while contributing to a wider knowledge of rubber species from a practical cultural standpoint. Thus the latest *Bulletin* mentions that with the assistance of Mr. J. A. Davy, Fazenda Dumont, Sao Paulo, Brazil, a large quantity of seeds of Remanso (*Manihot piauhyensis*) and Jequié (*Manihot dichotoma*) maniocaba rubbers was obtained and distributed to 32 botanical and agricultural stations in the tropics.

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## Scotland's Great Rubber Factory.

THE factories of the North British Rubber Co., Limited, are, to be sure, situated in Edinburgh, Scotland, and the great industry is Scottish, but in its beginnings it was American. I had long wished to visit these mills, and when the way opened to go by automobile from London to Edinburgh I was prompt in taking advantage of it. The 400 mile journey over the "Great North road" was a dream; perfect weather, no dust, lovely scenery, quaint towns and cities, old English taverns, clumsy police traps, friendly cyclists who exposed them—all was new to me and enjoyable from start to finish. Then, too, when we reached the Scottish highlands, and finally entered beautiful Edinburgh, the interest did not cease; in fact, it was augmented. Of course we visited Holyrood and all of the other historic places, but it is not of these but of the great rubber mill that this story shall treat.

The factories are very near the heart of the city, and Mr. Johnston, the secretary, and general works superintendents at once made me welcome. To describe in detail the patterns of boilers, the modern power plant, the huge spreader room, the much greater grinding room, or to tell of the size of the various departments—rubber shoes, clothing, sundries, mechanical goods, and tires—would take far too much space. A few figures as to equipment, however, are pertinent: Number of hands employed, about 4,000; area covered by the works, 8 acres; floor space, 388,775 square feet; daily coal consumption, 120 tons; horse power of engines, 4,000. There are 16 boilers, 25 calenders, 77 mixing and grinding mills, 35 vulcanizing pans, 75 vulcanizing presses of different dimensions, 32 spreading machines, and 34 rubber washers. There is also a fire brigade embracing chief, captain, two lieutenants, and 35 uniformed men.

Altogether the great Edinburgh concern is an aggregation of rubber factories, perfectly equipped, modern, successful—a company that markets its goods the world over. In China, for example, the North British "Scales chop" and "Lion chop" mean best quality rubber goods. The story of the beginnings of this great industry and of Henry Lee Norris, however, have never been told in print until now.

In view of the historic interest attaching to this important rubber factory it seems proper to introduce here a brief sketch of its foundation and progress prepared for the use of THE INDIA RUBBER WORLD, in the latter part of 1902, by Mr. William Firth, then secretary of the North British Rubber Co., a position which he had held continuously from the beginning, and from which he retired in 1905, after 48 years' service. The statement which follows is precisely as written by the late Mr. Firth:

### MR. FIRTH'S STATEMENT.

In the autumn of 1855 Henry Lee Norris, of Jersey City, and Spencer Thomas Parmelee, of New Haven, Connecticut, arrived in Scotland for the purpose of working a patent or patents of Goodyear's for the manufacture of India-rubber overshoes and boots. These patents were held by William Judson, advocate, New York.

These two gentlemen landed in Glasgow and began by searching for a suitable factory. None appearing in Glasgow, they went eastward to Edinburgh, and there found a suitable building which had been erected a few years before as a silk mill at a cost of about £50,000. This they rented, and as it was only partially occupied, they got almost immediate possession. A fine pair of condensing steam engines and boilers therefore were included in the lease, so that shortly after midsummer 1856 they found themselves ready to begin operations.

The firm was styled Norris & Co., Mr. Norris being general manager and Mr. Parmelee works superintendent. The other shareholders were William Judson, Benjamin F. Breeden, John Ross Ford, Christopher Meyer, James Bishop, and James A. Williamson, all of New York and neighborhood. The company was formed with 100 shares each £100.

The first parcel of overshoes were sold in August, 1856, to Mr. James Dick, who was then about founding gutta-percha shoe making in Glasgow that resulted so successfully for himself, and, through his munificence, for that city.

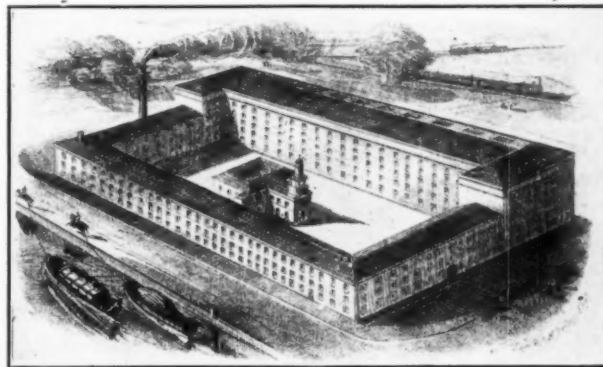
The firm of Norris & Co. existed until 1857, when the first limited liability act in Great Britain came into force, when that firm was dissolved and a new company was formed by the same shareholders and registered (about the first in Scotland) under that act as the North British Rubber Co., Limited.

The same year saw the extension of the company's operations to the manufacture of belting, hose, and mechanical articles, and also to the manufacture of combined cloth and rubber shoes, a branch which the company introduced and which is now a very important one in the rubber shoe industry. An improvement in the manufacture of rubber belting was patented about this time and has become the standard method. The products of the company kept steadily increasing in volume and in favor and the balance sheet for 1857 was decidedly encouraging.

In 1858 the three years' lease of the mills was expiring, and the property, having been hypothecated to a bank, came into the market and was bought by the sagacious manager for about one-sixth of its original cost and included in the price the 5½-acre park so suitable and convenient for extension in which the mills were situated at a very small annual fee. Henceforth the success of the company with careful management was assured.

Mr. Norris retired from the management in 1860 and was succeeded by the late D. D. Williamson, of New York, for five years, when Mr. Norris again took charge till 1871, when he was succeeded by W. E. Bartlett, of New York, who with a board of directors conducted the company till his death in May, 1900.

In 1863 an unfortunate fire took place in the south mill by which it was completely destroyed, and the east wing partially. Fortunately the north mill, where the shoes and waterproof clothing were made, was preserved, and with very little delay the damage was repaired and the work in the



ORIGINAL PLANT OF NORTH BRITISH RUBBER CO.



PLANT OF NORTH BRITISH RUBBER CO. IN 1887.

damaged part resumed. The effect of the fire was to transfer the chief ownership of the works from American to Scotch shareholders, for it was many years thereafter before the property could be insured even at the very high rates of premium demanded by the insurance companies, and indeed not until the introduction of automatic sprinklers (the invention of Mr. Henry Parmelee, of New York, son of the first works manager of the company) could the mills and their contents be fully covered by insurance. The great risk thus incident to their holdings led several of the American shareholders to part with their shares; these were readily taken over by Edinburgh capitalists who had confidence in the Scotch directors that had been chosen in 1860 to cooperate with the manager.

The first Scotch directors were John Murdock, solicitor; Hugh Rose, merchant, and William Thomson, shipowner, all of Leith. All the American shareholders were practically directors till 1865, and John R. Ford, Christopher Meyer, and Benjamin F. Breen for some years

longer. The several managers were also directors *pro tem*.

The American works superintendents besides Mr. Parmelee were, for varying periods, Messrs. Stevey, Douglas, Hyatt and Harris—Mr. Douglas alone remaining.

The original North British Rubber Co., founded in 1857, existed for 31 years ending in 1888, when, having expanded to the utmost limit allowed by its constitution, it was wound up and the present company was formed with increased capital, and in-

creased provisions for its further expansion. Its capital is £350,000, all paid up, there being 2,000 £100 shares, 2,000 £25 shares, all ordinary or dividend earning shares, and 5,000 £20 preference shares at a fixed dividend.

The company has been fairly successful and has originated several novelties in the rubber industry in boots, shoes, clothing, piston packing, belting, hose, etc., and notably in



PICTURE OF A TURKISH RUG (1900) SHOWING THE NORTH BRITISH WORKS.

pneumatic tires for bicycles and motors. The first detachable pneumatic tire was the "clincher," of which all others are in principle only imitations.

The company has branches in London, Liverpool, Manchester, Leeds, Newcastle-on-Tyne, Edinburgh, Glasgow, and Brussels, and agencies in Paris, Hamburg, Constantinople, etc.

The company has been a great boon to the industrial classes of Edinburgh, giving employment directly to about 2,500 operatives and to many more indirectly. It has a trained fire brigade that drills fortnightly with a portable fire engine and two fire pumps, with which ten nozzles can be supplied with abundance of water taken from a canal forming the boundary of one side of the works.

The 5½-acre park is now completely covered with buildings carrying on operations, and the company recently purchased an adjoining park on which meantime buildings for storage purposes alone have been so far erected, but which is available for further expansion. The company is presently in charge of Mr. R. G. Stewart and a board of five directors.

Under Mr. Williamson's management the Scottish Vulcanite Co. was started to develop or work some patent or patents held by Mr. Judson and still exists. Its works adjoin those of the North British Rubber Co. and it now produces celluloid as well as vulcanite.

#### PRESENT CONDITIONS.

It will be seen from what has preceded that the North British company have figured largely in the history of the rubber industry. To mention tires alone, their Mr. William Erskine Bartlett could well lay claim to the invention of what is the accepted type of automobile tire to-day, though the same principle was involved in the American invention covered by the "G. & J." patents. What happened was that the North British company could not do business in America, and the "G. & J." people could not do business in Great Britain. But Michelin, in France, where the automobile was developed, was hampered by neither patent, and did very much business. Similarly the so-called "Dunlop" tire was developed simultaneously on both continents, so that the existing British Dunlop tire company were obliged to buy up identical American and English patents to control in the world's trade the type of tire which made them famous. But more than that they were obliged to buy up Bartlett's patent—the product of a young American engaged in the tea trade in New York at \$1,500 a year until his brother-in-law, Mr. Norris, invited him to Edinburgh. It is no secret that the

Dunlop company paid \$973,300 to the North British Rubber Co. for the Bartlett patent, leaving them the right to make and sell tires under the same patent. How many "Dunlop" and how many "Bartlett" (clincher) tires, respectively, have been sold by the Dunlop company never will be known.

There are a few points in Mr. Firth's statement which require comment at this time, but on the whole it is sufficient to recall that it was written some years ago. The Scottish Vulcanite Co., Limited, have been liquidated [see THE INDIA RUBBER WORLD, December 1, 1907—page 75], but this was not an integral part of the North British Rubber Co. Mr. Ramsey G. Stewart—a Scotchman—retired recently from the management, after a successful career. There are now no Americans in charge of departments, but some of those named in Mr. Firth's account were in time important in the American rubber industry. The heirs of more than one of the American founders still hold and prize shares in the North British company. There still lives in New York, in his eighty-fifth year, John Murphy, who began rubber work at the age of 21, and who went to Edinburgh to get the Scottish Vulcanite Co. going. The original plant had been used in New York, but was put out of business by an adverse decision in a patent suit.

#### "AMERICAN FOUNDERS" OF THE NORTH BRITISH RUBBER CO.

HENRY LEE NORRIS, born in 1813 at Salem, Massachusetts, then an important shipping port, received a business training in New York city, and at the age of 23 was in charge of a warehouse of the Roxbury India Rubber Co., pioneers in the rubber industry in America—several years before vulcanization was known. In 1842 he went to Brazil for a short time, returning later as resident partner at Pará of Bishop, Norris & Co. He remained there for some years, serving for awhile as United States consul, and made a thorough study of the rubber situation. It was on account of the market for rubber at New York becoming glutted that he decided to open a new market abroad, and this led to his going to Edinburgh, where he took some machinery and a few operatives from a rubber factory in which he was interested at New Brunswick, New Jersey. Mr. Norris resided in Edinburgh at various times while in charge of the affairs of the North British Rubber Co., and died in the United States in 1881.

Spencer Thomas Parmelee, born 1805; with L. Candee & Co., rubber shoe manufacturers, 1848; with Ford and Meyer, rubber manufacturers, 1851; at Edinburgh 1855-58; died in America 1875. His son, Henry S. Parmelee, became a successful railroad man.

William Judson profited largely through his connection with



CHRISTOPHER MEYER.



HENRY LEE NORRIS.



JOHN ROSS FORD.

THREE PRINCIPAL FOUNDERS OF THE NORTH BRITISH RUBBER CO., LIMITED.



Charles Goodyear as his legal adviser and was a partner in some of the most important rubber factories in America. He died at Providence, Rhode Island, August 30, 1868.

Benjamin Franklin Breeden in 1849 became selling agent in New York for the rubber footwear manufactured by John R. Ford's company. He retired with a fortune and went to reside near London. He died at sea, in a steamer collision, December 22, 1873. Among the few fellow passengers saved was James Bishop, mentioned in this article.

John Ross Ford, born 1817, while in the drygoods trade married a sister of James Bishop, master of a line of sailing vessels between New York and Brazil, and having as correspondent at Pará Henry Lee Norris, the United States consul there. It was due to Norris that Bishop became a rubber importer at New York and due to Bishop that Ford took up the rubber manufacture, in which in time he became associated with Christopher Meyer. Mr. Ford left a fortune estimated at \$15,000,000. Two of his sons have been directors in the United States Rubber Co. from the beginning, and one, James Bishop Ford, has long been first vice president of the company. John R. Ford died 1896.

Christopher Meyer was the only "founder" not a native American. He was born in Germany in 1818 and died in New York in 1888, after having long been known to the public as the "rubber king." He is reputed to have started a rubber factory with \$300 borrowed from James Bishop, and later was estimated to be worth \$20,000,000. Associated with him particularly was John R. Ford, and at one time Lewis L. Hyatt, mentioned in Mr. Firth's sketch as one of the American superintendents prominent at Edinburgh.

James Bishop, early in life, was taken into partnership with his father, who had engaged in shipping successfully around New York before the days of steam. Later the firm sent ships to every continent. His beginnings in the rubber importing trade are referred to in connection with John R. Ford, his brother-in-law. At one time his house had a practical monopoly of this trade in the United States. He was some time a member of Congress (1855-57), and later won wide credit as chief of the bureau of labor statistics in his state, New Jersey (1878-93). He was long one of the most influential laymen in American Methodism. His narrow escape from death at sea has been mentioned, but that was preceded by his survival of what was at the time the most appalling railway wreck on record. He died in 1895.

James A. Williamson, son of a New York merchant and born 1816, was sent to Pará by James Bishop & Co., becoming familiar with the rubber trade. Later he was a partner in the firm, with Mr. Bishop and Mr. Norris. Mr. Williamson went to Edinburgh in connection with founding the rubber industry there, and an early manager of the North British company was his brother, Douw D. Williamson, previously comptroller of New York city and later a bank president. Mr. Williamson died April 6, 1897, only a few days after having been interviewed by this writer on a matter relating to the North British Rubber Co.

It may be mentioned that without exception the gentlemen referred to in the preceding notes held an important relation to the American rubber industry, and their reason for investing capital in Europe was that the American field in those days had been filled so completely.

#### RUBBER FOUNDATIONS FOR MACHINERY.

RUBBER foundations for heavy machinery are coming into more general use. London *Engineer* describes an unusually heavy steam turbine installed recently, giving particulars in regard to the use of rubber in its foundation. The turbine set, it says, is bolted to a special slab of concrete about 2 feet thick, reinforced with a steel grid, and supported by a series of circular rubber stools, which rest on the ordinary concrete built into the ground.

The top of the floating concrete slab is level with the engine room floor, but the edges do not come in contact with the floor, so that there is no connection between the concrete slab to which the turbine set is bolted and the foundation, except through the rubber. A trench is provided round the floating slab, so that the rubber stools can be inspected. Each rubber stool is a cylinder about 4 inches in diameter and 3 inches in height, when compressed by the weight of the turbine set. The rubber stools are all separately renewable, and can be withdrawn and reinserted by further compressing them, by tightening up the "jacks" in which they are held by means of screws. It is stated, however, that as the rubber stools have a considerable life, their renewal is not frequently required.

From the above description it will be understood that the turbine set is bolted to the concrete slab, and this rests on rubber stools, the stools in turn resting on an ordinary concrete foundation. The turbine in question is the largest hitherto mounted in this way.

#### A MACHINE FOR "ROOT RUBBER."

MECHANICAL means for doing the work of stripping the bark from "root rubber" continue to interest certain inventive minds. The *Gummi-Zeitung* contained recently a picture of a machine designed for such work. A chat with Captain Felix H. Hunicke, who has just returned from the African root rubber fields, however, leads one to believe that there is no real need for machinery for this preliminary stripping. During his experiments he made a tool which was simply an oak stake, sharpened at one end, so that it could be driven into the ground. At the upper end was fastened a piece of tool steel in which was a V-shaped groove. Across this was laid a hinged lever. In



MACHINE FOR TREATING "ROOT" RUBBER.

use the lever was raised, and one end of a root laid in the groove; the lever then was held down upon it, and as the root was drawn through the bark came off nicely. Simple as this tool was, however, it was not found necessary, the natives being able to strip the water-softened bark off with their hands just as easily and quickly as they could by using the tool. This emphasizes anew the fact often stated that only very simple machines or appliances are available in the jungle, and also that the native methods are often the most practical, however crude they may look at first sight. The "root rubber" referred to is of the class obtained from such plants as *Landolphia Thollonii*, the rubber containing parts of which exist wholly underground.

THE feature of *De Indische Mercur* (Amsterdam) appearing regularly under the heading "Rubber Scraps" and over the signature of Heer A. H. Berkhout, late conservator of forests for Java and now resident at Wageningen, Holland, is a capital summary, in brief, of current progress in rubber interests.

## The India-Rubber Trade in Great Britain.

*By Our Regular Correspondent.*

**I** DO not know how far the subject of rubber will be considered at the Seventh International Congress of Applied Chemistry, to be held in London May 27-June 2, when there will be a great gathering of chemists, scientific and technical, from all the leading countries. When the fifth congress met in Berlin in

### RUBBER AND THE CHEMICAL CONGRESS.

June, 1903, the late Dr. Weber, I remember, was prominent in bringing forward the subject of rubber chemistry, which was discussed at length in a subdivision of Section IV—organic chemistry and allied industries. This was not the case three years later, however, when the sixth congress was held in Rome. But it is probable that at the London meeting, where the same classification of topics will be in force, that rubber will come up for important notice, although no special subdivision of Section IV relates to rubber specifically. As in most international scientific congresses, the language difficulty presents itself in this case. Papers may be filed in English, French, German, and Italian, but arrangements are to be made for interpreting addresses and discussions. The King is patron of the congress and the Prince of Wales vice patron; Sir Henry E. Roscoe is honorary president and Sir William Ramsey, K. C. B., president, while I notice the names of some American scientists of distinction named on the honorary advisory committee.

SOME time ago a brief editorial notice referred to the patent taken out by Mr. T. Gare, of New Brighton, for the renovating

### GARE'S PATENT.

of old tires by submitting them to high temperatures and pressure. Some delay occurred in obtaining the British patent, which has now been granted. The business headquarters have for some time been located at Hazel Grove, near Stockport, and active experimental work has been carried on. I understand that licenses to work the patent have been granted to some foreign firm, and that an option for the purchase of the British patent is now in existence, the sum mentioned being a large one. At any rate, it seems as if the process is considered of very much more value than the great bulk of those to be seen in the lists of rubber patents, and its evolution will necessarily be watched with interest.

THIS solvent formed the subject of a recent paper before the Manchester section of the Society of Chemical Industry by Mr.

### CARBON TETRACHLORIDE.

L. G. Radcliffe. Entitled "The Examination of Carbon Tetrachloride," it dealt entirely with the determination of its impurities as found in commercial brands. The investigation, it was stated, arose in connection with some technical research work the nature of which was not forthcoming. Whether it had any connection or not with the rubber trade, I am therefore unable to say. It appears that the main impurity is carbon bisulphide, which is usually present in quantities from 1 to 3 per cent., and sometimes up to 5 per cent. This amount was found in no degree to destroy the characteristic of non-inflammability, so that those who employ it for rubber solution making need not feel any apprehension on this score when they declare it as non-inflammable. From being a comparatively rare and expensive chemical, carbon tetrachloride has come in a few years to be a commercial body sold by the ton and, besides finding employment in rubber works, it is now used by oil extractors and dry cleaners. It is also stated to have been used in rubber works for putting out fires, but though it is non-inflammable, it is not undecomposable, and I understand that the products of decomposition at a high temperature are such as to make it undesirable as a fire extinguisher.

WHILE not subscribing whole-heartedly to the expressed claim in certain advertisements that benzol is the only perfect rubber

### BENZOL AS A SOLVENT.

solvent, I feel that its advantage as a solvent, taken in conjunction with its now low price, are not sufficiently recognized by the trade. Weber laid stress on the fact that its boiling within the limited range of temperature was a drawback of considerable moment compared with solvent naphtha, which has a range of 40° C., more or less. This defect, he said, with special reference to the proofing trade, led to cockling or curling, due to too uniform and rapid drying of the texture. This statement may or may not, be a matter of general agreement among proofers of high class goods, but I imagine that it has not much wearing on heavily compounded proofs or in the various proofings which are not concerned with the production of garments. With regard to benzol as a substitute for carbon bisulphide in cold curing, the fact seems to be that in spite of all that has been said in its favor, it has still comparatively little application in England. Perhaps the case is different in America. At one time Weber was in favor of it, and was in business relations with a tar distillation firm who marketed it for the purpose. Later, however, he changed his views, as the result of experience. Where the advertisements referred to say that for this purpose it is superior to benzene, that is to petroleum spirit, I am in cordial agreement, but I am afraid this does not bring us much nearer the denied good of its general adoption in place of bisulphide of carbon.

### NEW COMPANY.

ONE of the most recent flotations is the Paramaribo Rubber and Lumber Estates, Limited, capitalized at £60,000 and with headquarters in Edinburgh. Rubber, balata and timber are to be exploited and plantations of *Hevea* are to be established. Compared with the Eastern plantation companies the record of these natural forest companies has not so far been an exhilarating one. In the present case the promoter takes the whole of his consideration in shares and none of the £40,000 capital appealed for has been underwritten. So far so good. There is, of course, plenty of the balata in Dutch Guiana; as to the prospects of the trade in timber I have no qualifications to speak. It was stated in the prospectus that the green heat timber from the property was used in the construction of the Manchester ship canal. Enquiries made from officials of the canal company elicited the intelligence that the timber had so far proved very satisfactory, and had justified its adoption instead of the alternative steel. It is thought, by the way, that the reference to its use on the canal might have been usefully elaborated by stating that it was for the lock gates; as it is, the reference is somewhat obscure except to engineers.

DESPITE the claims which have been made in so many patents for the devulcanization of rubber, I have not yet been fortunate

### DEVULCANIZATION OF RUBBER.

enough to come across any sample of reclaimed rubber sold on the large which satisfy me as to the achievement of this end, that is as far as solubility in the ordinary solvents is concerned. Not that this really affects the trade importance of the various excellent brands of reclaimed rubber now on the market. It is rather a question of correct nomenclature. I am not aware that any dealers who sell reclaimed rubber from steam vulcanized stock describe it as being desulphurized, and, as being equal to the original rubber, but language of this sort is to be found in patent specifications. As an instance, I may cite the patent of Moritz Köner, of Grünau, Germany, 1905. This refers to the desulphurization of the vulcanized rubber with the produc-

tion of the original rubber. In this patent the rubber crumb is acted on by a volatile solvent such as benzol or tolnol, under pressure, the rubber being obtained subsequently free from mineral and textile fabric, the last forming a marketable product. I understand that the process has been working for some time in Germany, and that the reclaimed rubber has met with a ready sale in the large scale. If the samples I have had are genuine, they cannot be said to represent the original unvulcanized rubber any more than do the products of other patent processes founded on the principle of the dissolution of the vulcanized rubber in hydrocarbon solvents. As I have already said, the point is not a vital one as far as trade prosperity is concerned, a fact which is testified to by the success of the Köner process in Germany, a success which to the best of my knowledge has not been approached by other patented processes founded on a dissolution of the vulcanized rubber. I have no knowledge as to the extent of the sales of the recovered fabric. I recently remarked in connection with another process that the expected revenue from this source had not been realized in England. According to the authoritative statements made in regard to the Köner process, however, the case is evidently different in Germany.

THERE has been much more country motoring done during this and last winter than in previous seasons, and the enthusiastic

#### MOTOR TIRE NOTES.

owner is now quite disinclined to recognize any close season. This, of course, is all in favor of the tire industry. Personally, I am not very keen for motor trips in winter weather, with ice on the roads. I recently had the experience of waiting  $3\frac{1}{4}$  hours in a desolate and exposed region on a frosty night while it was sought to repair some part of the mechanism. Eventually a relief car arrived and the derelict was towed home. But to pass on to matters of more technical import mention may be made as in previous years to the show held at Bellevue Gardens of the Manchester and District Motor Trades Association. Rubber manufacturers were not so well represented as in former years, the general and extensive exhibit of the Silvertown company having practically a monopoly of this department. The show itself, as regards vehicles, was certainly the best which has been held locally, but only tire features can be noticed. One or two novelties claim attention. The well-known Shrewsbury-Challiner company, of Manchester, had on view a new design of solid tire called the Challiner cross-fluted pioneer tire. This is especially intended for use on fire engines, which are exceptionally liable to skidding, owing to their having to go at high speeds round corners and often when the streets are slippery. The tire is intended to fill a want expressed locally, but no doubt if it earns good testimonials orders will come from a distance. Perhaps the greatest tire novelty of the Show was the Lynton resilient wheel and puncture proof tire made by the Lynton Wheel and Tire Syndicate, Limited, of Earlstown, Lancashire. The wheel embodies quite a new principle and has little in common with what are known as spring wheels. Briefly the invention is a metal wheel of the disc type, having one wheel rigidly attached to the hub, the other disc by means of a ball joint being allowed to rock in any direction upon the hub. The tire is a solid one, constructed in segments, and its construction allows far more displacement than in ordinary solid tires. The combined movement of tire and rim saves the tire from "pounding," thus materially lengthening the life of the rubber. To prevent creeping and to maintain the requisite space between the rubber sections the rim is constructed with a series of small transverse flanges. The wheel is made both single and twin so as to be applicable to motor vehicles of all types and sizes. Non-skidding devices were not particularly pronounced, the most prominent being the Cort detachable non-skid motor tire brand made at Market Harborough. This is not merely a brand attached rigidly to the tread, but rather a leather sleeve which is held in position by twelve steel clips, which fasten into the rim on each side of the wheel.

The India Rubber, Gutta Percha and Telegraph Works Co., Limited, in addition to the "Palmer Cord" tire made special display of their "Le Persan" tire, made at their French works and which has not previously been advertised in Great Britain. In the non-skid tire the steel studs are inserted in the tread, which is made of a special highly resistant rubber.

It is regrettable to notice that the Hartridge Tire Syndicate is in liquidation. Their tire was constructed in segments much more numerous than in the case of that referred to above, and great things were expected of it. The experimental work more particularly with regard to the molds for vulcanizing was carried out by Messrs. Iddon, the rubber machinists of Leyland, and involved some research work of importance. Another tire that promised to make a stir was the Slec, now in the same state of financial embarrassment as the Hartridge. Altogether it seems much of a gamble to join in novel tire schemes, considering the amount of preliminary expenditure necessary before income comes in and bearing in mind the opposition to be expected from wealthy interests soundly established.

At 3 o'clock in the morning of February 26, a serious fire broke out at the works of the North Western Rubber Co., Limited (Litherland, Liverpool). The

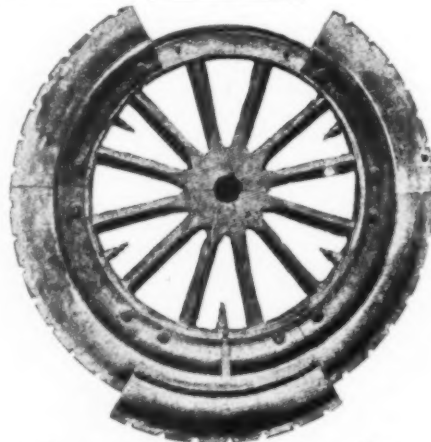
#### SERIOUS FIRE.

fire was confined to the finishing mill, one of the three large brick buildings which compose the works. This was burned out, and considerable damage done to the boiler house, though the efforts of the town fire brigade prevented the fire spreading to the other buildings. The damage, which is covered by insurance, is stated to amount to £50,000 [= \$243,325]. A good many men will be temporarily thrown out of employment, but Mr. E. E. Buckleton, the general manager, who was early on the scene, is taking energetic measures to effect the rejuvenation of the destroyed building. Work was not wholly interrupted, however.

#### TREATMENT OF INDIA-RUBBER.

A PROCESS for separating resins from rubber is covered by the United States patent No. 908,925, issued to Meyer Wilderman, of England. It consists in treating the rubber with a mixture of solvents, of which one when alone is a solvent of all the constituents of the rubber, while another when alone is only a solvent of resins; running off the mixture of solvents containing the inferior material, and recovering the solvents.

A method of manufacturing rubber solutions, consisting in treating raw rubber with symmetrical dichlorethylene, is the subject of United States patent No. 910,520, granted to Emil Fischer, of Germany.



FRANKLIN SECTIONAL PNEUMATIC TIRE.

[Six distinct pneumatic sections, each separately detachable from the wheel and fitted with an air chamber and wheel, there being no inner tube. Extra sections are carried when motoring, instead of complete spare tires. Invented by Franklin, of Luton, England.]



## The Growing Interest in Rubber Planting.

### A NEW RUBBER PLANTERS' ASSOCIATION.

THERE has been formed with headquarters at Antwerp the Association des Planteurs de Caoutchouc, for the general furtherance of the rubber planting interest, particularly in Ceylon, British Malaya, Java, and Sumatra. Generally the new organization is on the lines of the Rubber Growers' Association maintained by British interests under the chairmanship of Mr. H. Kerr Rutherford, of London, except that the Continental body is of wider scope. Membership in the Antwerp association we understand to be open to persons in any country who may be interested actually in the culture of rubber or in the rubber goods industry. The initial general committee is headed by Edouard Bunge, a leading rubber importer of Antwerp, and includes Emile Grisar, the official broker in the Antwerp trade, and also Dr. A. G. N. Swart, who was president of the late Netherlands commission at the International Rubber Exhibition at London, and Dr. W. R. Tromp de Haas, whose connection with gutta-percha planting in Java was noted in THE INDIA RUBBER WORLD of March 1, 1909 (page 204.) The association publishes an official monthly *Bulletin*, the first number of which was dated January, 1909, and which promises to be an interesting publication. The offices of the association are at 48 Place de Meir, Antwerp.

### BRITISH INVESTMENTS IN RUBBER.

THE investment of British capital in the production of rubber, either on plantations or in the forest, continues on a large scale. There can be, of course, no adequate record of the extent of actual investments, but it is of interest to notice the number of new companies registered in Great Britain in this line. London *India-Rubber Journal* has compiled a list of companies registered in Great Britain alone during 1908, which may be summarized as follows:

To OPERATE IN	Companies.	Capital.
South or Central America.....	7	£458,500
Sumatra .....	4	325,000
Malaya .....	8	315,000
Ceylon .....	4	265,000
British North Borneo .....	2	230,000
Java .....	3	170,000
Africa .....	2	120,000
South India .....	1	60,000
Not Stated .....	10	67,000
Total .....	41	£2,010,500

[Equivalent to \$10,243,982.50, United States currency.]

It is interesting to observe how attractive to British capital are the Dutch East Indies, which stand in the above table for nearly one-fourth of the whole authorized capital of the companies under review. The investments in the first line relate mainly to a few large enterprises for developing forest rubber in South America.

During 1907 nineteen new joint stock companies were registered in Ceylon in connection with rubber planting in that colony, with a total capitalization of 12,810,000 rupees [= \$4,155,948.30]. It is presumed that most of these companies have been formed to take over plantations already in existence, which have made sufficient progress to have become interesting to capitalists.

### GERMAN INTEREST IN RUBBER PLANTING.

PARTICULAR attention has been called to the extent of investment of British capital in rubber culture by the fact that definite results have been reached from plantations under British auspices to a larger extent than in the case of any other country. Such investments, however, have by no means been confined to Great Britain. The German people, for example, have been very active

of late in promoting rubber plantations, particularly in their colonies in Africa. In *L'Agronomie Tropicale* (Brussels, January 25) E. De Wildeman gives a list of forty German companies interested more or less in the cultivation of rubber, some of them being devoted to this interest, exclusively, and others in rubber in connection with other products. There is included in the list the important New-Guinea-Compagnie, who, while extensive planters of rubber, are interested also largely in cocoanuts and cacao, and the Deutschen Ecuador Cacao Plantagen- und Export-Gesellschaft, A. G. Of the companies named 17 are formed to operate in German East Africa and 19 in Cameroon and Togo. amount of capital stated for 36 of the companies is 100,460,600 marks [= \$23,909,622.80].

### RUBBER PLANTING IN THE DUTCH EAST INDIES.

THE extent to which capital has been interested in rubber plantation enterprises in the Dutch East Indies probably is larger than has been appreciated in rubber planting circles generally. In the first number of *Bulletin de l'Association des Planteurs de Caoutchouc* appears a list of the companies which have been registered in different countries for carrying on the business of rubber planting in the Dutch East Indies, with the amount of capital stated in each case. The latter detail may be summarized as follows:

<i>In Java:</i>	
Dutch companies .....	florins 3,426,000
British companies .....	5,020,000
Belgian and French companies.....	12,670,000
German companies .....	904,000
<i>In Sumatra, Borneo and Riouw:</i>	
Dutch companies .....	1,350,000
British companies .....	16,164,000
Belgian and French companies.....	7,400,000
German companies .....	335,000
Total .....	florins 48,089,000

[Total equivalent to \$19,331,778.]

The list includes a total of 69 companies, of which 43 have been formed to operate in Java and 26 in Sumatra, Borneo, and Riouw. Twenty-one of these companies are Dutch, 25 British, 17 Belgian and French, and 6 German.

### GOOD YIELD IN THE MALAY STATES.

THE Federated Malay States Rubber Co., Limited, an Antwerp company, during three years of operation (June 1 to May 31) have reported yields from their plantation as follows:

	1906.	1907.	1908.
Rubber produced (pounds).....	13,323	32,175	66,725
Trees tapped .....	12,335	12,335	14,196
Average per tree (pounds).....	2.6	2.6	4.72
Average price realized .....	\$1.35 <sup>3</sup> / <sub>4</sub>	\$1.31 <sup>3</sup> / <sub>4</sub>	....
Profits for the year (francs).....	74,003	173,080	180,061
Dividend .....	5%	9.8%	8 <sup>1</sup> / <sub>4</sub> %

The oldest trees on the company's estate were planted in 1899, but only a small proportion are so old as this.

### THEY HAD RUBBER TO BURN.

IN the *Mexican Herald* (February 13) is reported a fire on the plantation of La Esperanza Rubber Co., in the state of Vera Cruz, in which was destroyed "more than a ton of fine creamed rubber and possibly as much scrap," the product of the first year's tapping, which began in October last. Most of the rubber was in cases ready for shipping. La Esperanza company began operations about ten years ago, the incorporators being residents of Providence, Rhode Island. The manager, Carlton Hale, had developed a new method for smoking rubber after creaming, and it was in connection with such work that the fire occurred.

## THE NEXT RUBBER EXHIBITION.

THE proposal to repeat in London the International Rubber Exhibition held at Olympia last year is being kept alive, and doubtless such an exhibition will be held, though the question of the proper date is in abeyance. A communication to THE INDIA RUBBER WORLD indicates that the management are still making inquiries, and that thus far the manufacturers who have expressed an interest are mostly in favor of holding the exhibition in 1910, while the planters seem to prefer 1911. Later information is to the effect that 1911 has been fixed upon definitely as the date, and every indication points to this as being satisfactory to all interests concerned.

## PLANTING MISCELLANY.

THERE are now growing on the "Chival" estate of the Orizaba Rubber Plantation Co. (Chicago), in Chiapas, Mexico, about 1,000 *Hevea* rubber trees, the growth of which encouraged the owners of an adjoining plantation recently to order 25,000 *Hevea* "stumps" from Ceylon.

The new rubber planting interest has opened the way for a new branch of patent litigation as related to rubber. An illustration is found in the proceedings before the registrar of patents of Ceylon over the alleged infringement of a patent granted to Mr. E. L. Walker, a planter in the Ratnapura district for the coagulation of rubber latex. Mr. Walker is one of the superintendents of a large group of plantations owned by The Weyganga Rubber Co., Limited, with 3,100 acres planted to rubber.

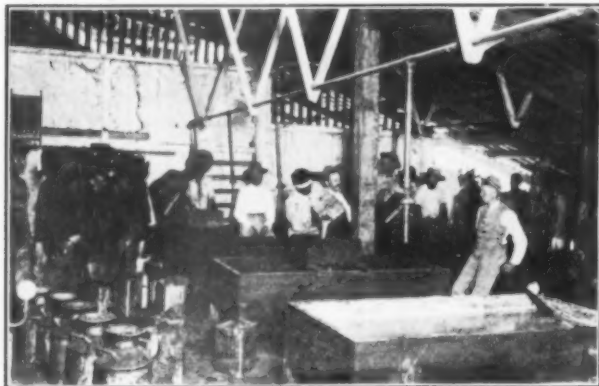
The Kalutara Planters' Association—one of the several dis-

trict planting associations in Ceylon—reports that at the end of 1908 its members had 26,637 acres planted to rubber against 23,000 acres one year previously. It is estimated that there are 7,000 acres under rubber to-day not represented by the association. The rubber production in this district in 1908 was 568,945 pounds, against 285,299 pounds in 1907.

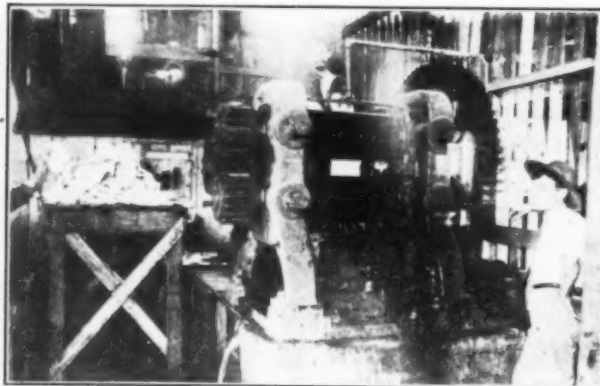
Plantation rubber from the Congo Free State has actually begun to come to market, though as yet in very small quantities. The Société Anonyme Belge pour le Commerce du Haut Congo, who have planted 3,000,000 rubber vines, are reported to have sold 1,144 pounds of rubber, the product of 3,000 plants, at 9.50 francs per kilogram [=97½ cents per pound].

## "LA ZACUALPA" RUBBER LABORATORY.

SOME views on this page relate to the rubber laboratory on La Zacualpa Rubber Plantation in the state of Chiapas, Mexico. The latex obtained by tapping is conveyed to the laboratory in five-gallon cans and poured through a strainer into vats, where it is diluted with water, when the rubber rises to the top like cream on milk, in a white spongy mass some three or four inches thick. The rubber thus formed is then cut into strips, and passed between heavy corrugated rollers, water being run through at the same time and is pressed by the rollers into sheets about ¼-inch in thickness. The sheets are then hung in the drying room and when sufficiently dry are pressed into square blocks of about 25 pounds each, hydraulic pressure of 1,500 pounds to the square inch being used.



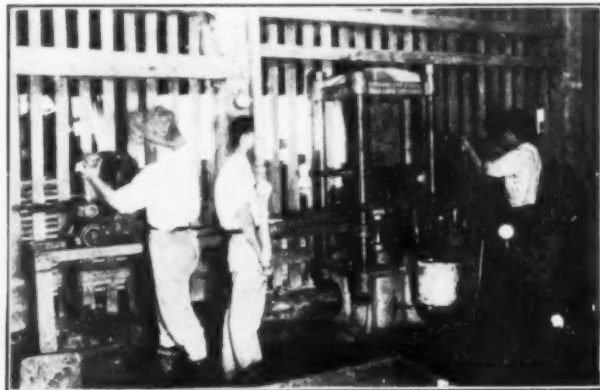
VATS FOR COAGULATING RUBBER.



ROLLERS FOR TREATING RUBBER.



RUBBER IN THE DRYING ROOM.



HYDRAULIC PRESS FOR RUBBER.

PREPARATION OF RUBBER ON "LA ZACUALPA" PLANTATION IN MEXICO.

## Rubber and the American Tariff.

**I**N the inaugural address delivered by Mr. Taft on taking office as President of the United States, on March 4, he referred to the pledge made by his party, prior to the last general election, that a revision of the tariff would be made at the earliest practicable date. He gave notice at that time of an extraordinary session of the Congress, to deal with this subject, and such session was convened on March 15. In a message to the congress on this date the President called attention to the pledge which had been made to the country and suggested prompt action not only on a revision of the tariff schedules, but in the matter of providing against an imminent deficit in the revenues.

During the interim the committee on ways and means of the house of representatives had been at work upon a new tariff bill, in connection with which there had been an extensive series of hearings of representatives of the leading industries in the United States, as well as of the importing interests affected by the tariff schedules, and the new bill was introduced on March 17. While every indication exists that the work of the special session will proceed promptly, it is only reasonable to suppose that the consideration of a schedule of 712 items by a legislative body of nearly 400 members will lead to very many changes in the bill as presented, not to mention several new features in the administrative part of the bill, all of which must precede the consideration of the bill by the senate, and here again the schedules are liable to have many changes made in them.

In view of the fact that the bill now under consideration can by no manner of means be enacted into law as it stands, it seems hardly worth while at this time to go into detail regarding the changes proposed in the existing tariff schedule. It may be said, however, that so far as the india-rubber industry is directly concerned the new bill proposes very few changes.

Crude india-rubber and gutta-percha remain on the free list. The description of waste rubber is altered so as to remove a certain degree of ambiguity in the existing statute. The law of 1897 includes in the free list:

579. India-rubber, crude, and milk of, and old scrap or refuse india-rubber which has been worn out by use and is fit only for remanufacture.

The new provision reads:

587. India-rubber, crude, and milk of, and scrap or refuse india-rubber, fit only for remanufacture, and not ground or otherwise reduced in size.

The rate on manufactures of india-rubber not specially provided for remains at 30 per cent., and on products of gutta-percha at 35 per cent., *ad valorem*. The rates are unchanged on products of cotton and india-rubber and silk and india-rubber. The rate on oil-cloth and linoleum is increased slightly. The rate on "sulphur, refined or sublimed, or flowers of," is reduced from \$8 to \$6 per ton. Barytes remains at the old figure. The rate on whiting and Paris white, dry or ground in oil, is cut in half.

The rate of 10 cents per pound on chicle is retained.

The new bill proposes a minimum and maximum tariff, the maximum rates being generally equal to the minimum rates, with 20 per cent. added. The lower rates are to be applied to imports from countries which give the United States as good terms by way of tariff as are given to any other nation, and the maximum rates to imports from other countries. The executive is instructed to collect duties, whether minimum or maximum, in accordance with the terms of the bill, leaving open to the courts to decide upon the legality of the action.

It would be impossible, without laborious analysis, to estimate the percentage of reduction in the proposed tariff rates, but generally the reduction seems slight. There are few additions of importance to the free list, while duties have been increased on some other articles, notably those classed as luxuries. The President has asked the congress to make provision for revenue

from other sources than the customs service, to provide against any failure of the new schedules to yield enough money for the purposes of government.

### RUBBER AND ALLIED TRADES AT THE HEARINGS.

THE tariff hearings before the committee on ways and means of the house of representatives were begun at Washington on November 10, 1908, and continued until March 10, the printed record of the whole filling 8,103 pages. The rubber goods industry was scarcely represented. There were few rubber men present before the committee, very few representatives of the industry in any way, and no combination or association of rubber manufacturers was heard from.

The president of the American Hard Rubber Co. (New York) submitted a brief, with statements regarding the lower rate of wages paid by their foreign competitors in the hard rubber branch, and asking that for the benefit of the manufacturer and wage earners in this country the present rate of 35 per cent. be retained. Mr. Myer Dittenhoefer, representing the Vulcanized Rubber Co. (New York), and other manufacturers of hard rubber and hard rubber goods, stated that their foreign competitors paid for labor from 40 to 45 per cent. less than wages in America.

The Bishop Gutta-Percha Co. (New York) were represented by Mr. William Boardman Reed, who stated that they were manufacturers of gutta-percha goods, including sheet or tissue. In the case of the latter the greater percentage of the cost was for labor, and a large business is done, but if the duty, now 35 per cent., was lowered even to 25, there would be nothing attractive in the business.

The N. Tire Rubber Sponge Co. (Chicago), through their manager, Mr. B. B. Felix, asked that rubber sponges for toilet use be specified in the tariff schedule, and that a higher duty be imposed than on rubber goods generally—say 50 per cent. *ad valorem*. This was asked on the ground that the labor cost for such goods is so much higher in the United States than in Europe.

Mr. B. A. Levett, of New York, representing several importers of waste rubber, asked for a change in the existing specification of scrap rubber in the free list, which relates to rubber "which has been worn out by use and is fit only for remanufacture." Mr. Levett asked that the phrase be amended so as to introduce scraps of new rubber as well, and the committee have done this in framing the bill now under consideration. Mr. Levett also protested against the present ruling at the custom houses under which wool-lined old rubber boots and shoes are made dutiable as wool waste. He asserted that such wool had absolutely no value, as the only way in which the rubber in such goods could be recovered was by destroying the wool.

Manufacturers of safety fuse asked for a separate classification in the tariff law for this line of goods. To-day the duty on fuse is based upon the component material of chief value, which differs with different importations, making the rate unstable. Importations are now very large—14,000,000 pounds a year being credited to the Du Pont Powder company at Wilmington, Delaware; 7,500,000 feet to Insoloid Co., of Denver, and considerable quantities to seven other companies. The National Fuse and Powder Co. (Denver) during 10 years have not paid a dividend, on account, it is claimed, of the severe competition from abroad. A prominent German manufacturer is reported to be placing gutta-percha fuse f. o. b. vessel at foreign points of shipments at \$1.91 per 1,000 feet, or only 63 per cent. of the actual cost of manufacture by the National Fuse and Powder Co. The tariff committee was informed: "For



five years this company manufactured, at a loss, gutta-percha fuse similar to the fuse now being imported, owing to the difference in cost of labor and material, and finally was compelled to discontinue the manufacture of gutta-percha fuse and discard all of the machinery which had been imported from Germany. The plant was then equipped with new machinery for the manufacture of taped fuses, which command a lower price on the market."

S. M. Frank & Co. (New York), manufacturers of briar pipes, asked for a reduction of the duty on celluloid mouth-pieces from the present rate of 60 per cent. *ad valorem* to say 25 or 30 per cent.

On the first day of the hearing was taken up the chemical schedule, when representatives of the Paint Manufacturers' Association of the United States appeared to protest against lower duties on lead, oxide of zinc, barytes, linseed oil, and various other articles which enter into the rubber manufacture as well as the paint trade. A representative of the New Jersey Zinc Co. and other concerns manufacturing white oxide of zinc and lithophone argued against lower duties on these products, and asked that lithophone be specified in the new schedules. On the following day the subject of barytes was considered at length, including the relative production and use of barytes and barytes products in the United States and elsewhere, and the relative cost of production, the producers asking for a higher rate on imports for the purpose of development of the domestic mines.

The Nevada Sulphur Co. insisted that "there is ample crude sulphur in the United States to more than supply our domestic consumption, and the only reason that the mines have not been developed into large producers is that the element of labor figures so largely into the cost of production; that the main sources of competition to be met are located where about the lowest rates of wages in the world prevail, Sicily and Japan; that these competitors are so located that they can obtain cheap water transportation to our markets, while the occurrence of most of the sulphur deposits in our country is at such distance from the markets as to require the most expensive land carriage; that the tariff, which we believe was designed to equalize these differences, has been so interpreted as to remove any measure of protection to the home producer." The point is made that, through a wrong use of terms, sulphur is entering the country free which, under the intention of the existing law, should pay \$8 a ton.

A brief was submitted in behalf of ten firms of card clothing manufacturers who desired a higher rate on imports of card clothing or else a reduction in the present tariff on the card cloth and card wire used by the domestic manufacturers. Figures were presented to show the increase in the importation of card clothing since the present tariff act has been in effect and the decline in the domestic industry.

The organized automobile manufacturers appeared to ask that no reduction be made on imports of automobiles, and similarly representatives of the importers appeared to ask for lower rates. In the bill subsequently reported to congress the old rate of 45 per cent. on automobiles and parts is continued. It might be more proper to say that such goods are specified in the new bill, whereas automobiles hitherto have been dutiable at 45 per cent. *ad valorem* under a general provision as "manufactures of iron and steel."

The chicle interest was represented at the tariff hearing by statements presented by the American Association of Chewing Gum Manufacturers. No fewer than seventeen independent firms were mentioned by name. The American Chicle Co. was not mentioned in the printed report of the hearings. The chewing gum manufacturers object to the import duty of 10 cents per pound, since it was their understanding at the beginning that the duty was for revenue purposes only, at a time when the government was in more pressing need of money than now. The tariff committee was asked at least to favor

a reduction of the chicle duty to 5 cents a pound. It was asserted that, considering the average price of chicle and the percentage of impurities which must be got rid of before using the raw material, the present import duty was equal to 45 per cent. *ad valorem*. Besides, an equal amount by weight of sugar is used, and this also is a dutiable commodity.

#### WORKING FOR A TARIFF COMMISSION.

ONE result of the recent National Tariff Commission Convention at Indianapolis [see THE INDIA RUBBER WORLD, February 1, 1909—page 166] has been the appointment of a "general committee" of 100 members, including one or more members from each state, to keep alive the work begun at the convention. Mr. Henry R. Towne, president of the Yale & Towne Manufacturing Co. and of the Merchants' Association of New York, read at Indianapolis a plea for scientific regulation of the tariff, his paper being entitled "The Neutral Line." His idea was that tariff schedules should not be framed as now, (1) by uninformed legislators, (2) at the request of parties in interest. He would have a permanent commission, non-partisan and non-official, for

The Consumer, the people, to appeal to.

The Producer, who seeks relief.

The Congress, to obtain facts, advice, and assistance.

The Administration, to obtain facts and information pertinent to commercial treaties.

The committee recently appointed will work along the lines of Mr. Towne's paper, with a view to the ultimate creation of such a permanent commission as it described. President Taft is reported to favor some such commission, but without power to fix rates—something, by the way, not embraced in the Indianapolis plan. The chairman of the committee of 100 is Mr. J. W. Van Cleave, of St. Louis.

#### NOTES FROM THE AMAZON REGION.

PROGRESS continues to be reported on the construction of the Madeira-Mamoré railway, around the Madeira river falls. The *Brazilian Review* heard that 17 kilometers [=10½ miles] had been laid to the end of 1908. Another report was that 50 kilometers more were in readiness for receiving the rails.

Joao Antonio Luiz Coelho, P.H.D., has been proclaimed governor of the state of Pará for the next four years, succeeding Dr. Augusto Montenegro, who ably filled the post for eight years. Dr. Coelho is 58 years of age and was educated in Brussels, Paris and Philadelphia. He was secretary to the late Baron de Marajó while the latter was governor of Pará.

The *Electrical World* (New York) contains some interesting photographic views of the electric lighting and railway system of Pará. The company operates 35 miles of railway and 14½ miles of lighting cables. The lighting circuits are being placed underground, the cables used being supplied by Callender's Cable and Construction Co., Limited, of London.

Mr. Roger Casement, C.M.G., for some time past British consul at Pará, where he recently prepared an official report on the rubber trade of notable interest and value, has been promoted to the position of consul general at Rio de Janeiro. Before going to Pará he represented his government in the Congo Free State, and was thanked by the House of Lords for his work at that post.

The net profit of the Amazon Telegraph Co., Limited—operating a cable line between Pará and Manáos—for the fiscal year ended June 30, 1909, was £14,800, or £6,000 more than in the previous year. The amount was applied to the reduction of the outstanding debit balance, which has now been reduced to £51,000. No dividend has been paid on the £250,000 of share capital since the opening of the company's cable, in 1896.

THE Continental Dunlop Pneumatic Tyre Co.'s danske Filial ved William Gunn is the name of the firm representing Dunlop interests in Copenhagen.

## Recent Patents Relating to Rubber.

## UNITED STATES OF AMERICA.

ISSUED FEBRUARY 2, 1909.

- N**O. 911,041. Pneumatic tire. [Comprises an outer casing, with a plurality of transverse division walls, and a plurality of inner tubes between such division walls.] E. J. Hicks, Indianapolis, Ind. 911,182. Tire mold. [For pneumatic tires.] P. D. Thropp, Trenton, N. J.
- 911,203. Tire shield [of flexible metallic plates]. J. Burmeister, Spirit Lake, Iowa.
- 911,257. Tire. L. M. Nelson, Douglas, Wyo.
- 911,389. Respiration apparatus for use in coal mines and other places. W. E. Garforth, Normanton, England.
- 911,523. Antiseptic syringe. C. Piers, Chicago.
- 911,479. Anti-slipping shoe soles. J. G. Doughty and J. R. Sanford, assignors to The Flexible Rubber Goods Co., all of Winsted, Conn.

## Trade Marks.

- 28,171. New York Belting and Packing Co., Ltd., New York city. The word *Salamanda*. For rubber packing.
- 39,168. The Kempshall Mfg. Co., New York city. The representation of a golf ball of a particular construction. For golf balls.
- 29,169. *Same*. The words *Black and White*. For golf balls.

ISSUED FEBRUARY 9, 1909.

- 911,716. Lawn sprinkler. H. Gibbs, Chicago, assignor to W. D. Allen Mfg. Co.
- 911,840. Hose coupling. T. B. Reid, Morristown, N. J.
- 911,861. Mold. J. K. Williams, Akron, Ohio, assignor of one-half to The Williams Foundry and Machine Co.
- 912,030. Rubber. [An overshoe of the foothold type.] J. S. Ramlose, Newport, R. I.
- 912,097. Hose clamp. P. E. Erickson, Port Chester, N. Y.
- 912,213. Pine or hose coupling. I. S. Dismuth, assignor of one-half to W. T. Frey, both of Cincinnati.

## Trade Marks.

- 39,053. L. & M. Rubber Works, Carrollton, Ohio. The words *The Buckskin* within a wreath. For hot water bottles and fountain syringes.

ISSUED FEBRUARY 16, 1909.

- 912,376. Pneumatic spring [for carriages]. W. H. Humphreys, Liverpool, England.
- 912,422. Automobile tire. [Pneumatic, with special tread.] J. Shaw, Fort Dodge, Iowa.
- 912,479. Heel. [Leather and rubber.] H. R. Manz, Elgin, Ill.
- 912,493. Lawn sprinkler. R. C. Sanders, Pierre, S. D.
- 912,583. Soft tread horseshoe. F. C. Limbocker, East Spokane, Wash.
- 912,725. Pneumatic tire. G. J. Paynter, Philadelphia.
- 912,809. Union hose and pipe coupling. W. L. Canniff, New York city.
- 912,943. Cushion tire for vehicle wheels. E. J. Duff, Liverpool, England.
- 912,955. Hose clamp. T. Harber, assignor of one-half to R. I. Gray, both of Gray, Ky.

## Trade Marks.

- 36,624. New Jersey Car Spring and Rubber Co., Jersey City, N. J. The representation of a diamond (geometrical figure). For rubber fire hose.
- 39,105. A. W. Faber, Stein, Germany. The word *Castell*. For rubber bands.
- 39,623. Muleonroy Co., Philadelphia. The representation of the toe of a boot surrounded by a circle of boots. For rubber footwear.
- 39,878. The B. F. Goodrich Co., Akron, Ohio. The word *Falcon*. For rubber hose.
- 39,879. *Same*. The representation of an eagle. For rubber hose.

ISSUED FEBRUARY 23, 1909.

- 912,988. Vehicle spring. A. Carpenter and C. C. Kisselle, Findlay, Ohio.
- 912,989. Cushioning device for vehicles. *Same*.
- 913,043. Rubber tire repairer. J. M. Padgett, Topeka, Kan.
- 913,144. Detachable pipe or hose coupling. G. James, S. Benson and W. Wilson, Chicago, Ill.
- 913,219. Vehicle wheel. T. Midgeley, Hartford, Conn., assignor to The Hartford Rubber Works Co.
- 913,220. Tire. *Same*.
- 913,257. Detachable securing means for tires. J. Baker, Pasadena, Cal.
- 913,252. Detachable securing means for tires. *Same*.
- 913,253. Detachable securing means for tires. *Same*.
- 913,254. Detachable securing means for tires. *Same*.
- 913,259. Hose coupling. C. H. Chapman, Winchester, Mass., assignor to Lightning Hose Coupling Co.
- 913,295. Vehicle tire. W. A. Kōneman, Milwaukee, Wis.
- 913,351. Detachable hose coupling. H. Beraud and E. J. Achée, Plaquemine, La.
- 913,558. Machine for cutting rubber rings. L. J. Pianarosa, Boston, Mass.
- 913,580. Motor car wheel. J. H. Symonds, Swampscott, Mass.

[NOTE.—Printed copies of specifications of United States patents may be obtained from THE INDIA RUBBER WORLD office at 10 cents each postpaid.]

## GREAT BRITAIN AND IRELAND.

## PATENT SPECIFICATIONS PUBLISHED.

The number given is that assigned to the Patent at the filing of the Application, which in the case of these listed below was in 1907.

\*Denotes Patents for American Inventions.

[ABSTRACTED IN THE ILLUSTRATED OFFICIAL JOURNAL, FEBRUARY 3, 1909.]

- 22,019 (1907). Football valve consisting of a rubber tube constructed towards its lower end, the valve being cemented to the bladder, and stitched to the outer leather casing. F. H. Sprang and F. Bryan, London.
- 22,133 (1907). Tire charged with a liquid compound which sets to form a resilient core; it may be provided with an inner tube. Equatorial Trading and Mfg. Co., E. A. Muskett, and J. B. Scammell, London.
- 22,209 (1907). Means of holding a detachable tire carrying rim. P. E. Doolittle, Toronto, Canada.
- 22,240 (1907). Football. J. Turner, Gorton, and A. Buxton, Liverpool.
- 22,267 (1907). Twin pneumatic tires seated in grooves in the felloe, at the sides of a central segmental rim carrying a rubber buffer. E. C. Tame, London.
- 22,321 (1907). Supplementary rim to enable a solid tire to be substituted for a damaged pneumatic. F. H. Wynne, London.

[ABSTRACTED IN THE ILLUSTRATED OFFICIAL JOURNAL, FEBRUARY 10, 1909.]

- 22,362 (1907). Tools for removing and replacing pneumatic tires. W. B. Lake and E. F. Elliott, Braintree, Essex.
- 22,369 (1907). Diving armor, with joints to allow the diver to bend his limbs at a right angle. F. Gall, Würtemberg, Germany.
- 22,374 (1907). Non skid device for tires. P. L. P. Jaugey, Paris, France.
- \*22,379 (1907). Apparatus for removing the gutta-percha cover from golf balls. E. G. Loomis, Norristown, Pennsylvania.
- 22,382 (1907). India-rubber substitute. To a mixture of glue glycerine, and chrome salt lead plaster is added to increase tensile strength, toughness, and elasticity, and to prevent it from becoming hard and brittle. R. Neufeld, Vienna, Austria.
- 22,402 (1907). Disc wheels with pneumatic tire. T. Duysens and two others, Maastricht, Holland.
- 22,580 (1907). Walking sticks, golf clubs, and the like, made of a composition having Pará rubber as a central ingredient. New Eccles Rubber Co., Ltd., and F. R. Mitchell, Eccles.
- 22,626 (1907). Extra tread cover of rubber and leather for pneumatic tires, with non slipping studs. A. Beaujon, Paris, France.
- 22,640 (1907). Material adapted for filling tires formed by introducing a gas generating substance into gelatinous or other elastic matter; it may be applied to Zakingum, made by the same inventor. Z. Olsson, Stockholm, Sweden.

[ABSTRACTED IN THE ILLUSTRATED OFFICIAL JOURNAL, FEBRUARY 17, 1909.]

- 22,845 (1907). Spring wheel, with rim adapted for solid or inflated cushion tire. R. Diesel, Munich, Germany.
- \*22,914 (1907). Hose coupling. R. M. Haley, Fostoria, Ohio.
- 22,953 (1907). Pneumatic tire with non skidding device of elongated hard metal studs. G. Hookam, Birmingham.
- 22,978 (1907). Solid rubber tire with articulated floating rings, fixed to the sides by bolts fastened to the tire. A. W. Torkington, Purley, Surrey.
- 22,919 (1907). Heel protector. J. G. Barnes, Bradford.
- 23,030 (1907). Preparation of gelatine adapted for use in rubber substitutes and other purposes. W. H. Perkin, and Whipp Bros. & Tod, Manchester.
- 23,031 (1907). India-rubber substitute made by dissolving gelatine in wood tar or coal tar creosote or any suitable constituent, boiling, and rendering the gelatine insoluble, as for instance with formaldehyde. *Same*.
- 23,058 (1907). Leather cover for pneumatic tires. E. Kerr, Dublin.
- 23,096 (1907). Inextensible wires for the beaded edges of tires of the Michelin type. B. Blundstone, and D. Moseley & Sons, Ltd., Manchester.

[ABSTRACTED IN THE ILLUSTRATED OFFICIAL JOURNAL, FEBRUARY 24, 1909.]

- 23,149 (1907). Double top of the diabolo type. S. A. Marples, London.
- 23,223 (1907). Pneumatic tire with non slipping rings. G. Bird, Earley, near Reading.
- 23,300 (1907). Spinning cone for diabolo. M. Lawton, trading as J. Lawton & Sons, Birmingham.
- 23,419 (1907). Pneumatic tire with tread of metal pieces. T. Winans, London.
- 23,444 (1907). Spool for the diabolo game. C. Gutmann and J. C. Schiffnie, Nuremberg, Germany.
- 23,481 (1907). Stuffing box packing. J. A. Fisher, London.
- 23,489 (1907). Vulcanizer for tire repairs. W. Frost, and H. Frost & Co., London.
- 23,498 (1907). Pneumatic tire with metallic springs inside an ordinary cover. A. A. Joullain, Levallois-Perret, France.
- 23,640 (1907). Mud guard for the front of boots. W. H. Moore, Folkestone.
- 23,646 (1907). Disc wheel with thick tread of solid rubber. W. J. C. Schwarz, Liverpool.
- 23,668 (1907). Pneumatic tire with twin tread. F. Reddaway, Manchester.

## THE FRENCH REPUBLIC.

## PATENTS ISSUED (with Dates of Application).

- 394,415 (Nov. 25, 1907). M. Hermandey. Pneumatic tire.  
 394,471 (Sept. 19, 1908). Sinclair and Rucker. Detachable tire rim.  
 394,483 (Sept. 19). A Duni. Pneumatic tire.  
 394,526 (Nov. 28, 1907). J. P. Serve. Pneumatic spring for carriages.  
 394,534 (Sept. 22, 1908). R. Nemecek. Tire protector.  
 394,569 (Nov. 30, 1907). P. Levy. Pneumatic tire.  
 394,595 (Sept. 24, 1908). G. W. Smith. Rivet studded tire.  
 394,597 (Sept. 24). P. J. Bernard. Cover adapted to removable rim for tires.  
 394,656 (Aug. 26). W. B. Hartridge. Pneumatic tire.  
 394,663 (Aug. 31). A. Wursten. Armored pneumatic tire.  
 394,671 (Sept. 12). Shade and Gersbacher. Pneumatic tire.  
 394,735 (Sept. 28). C. E. Moser. Elastic wheel.  
 394,757 (Sept. 29). M. Poulet. Elastic tire, with metallic rings.  
 394,777 (Sept. 29). M. Bandou. Puncture proof pneumatic tire.  
 394,795 (Sept. 30). A. Heineman. Synthetic rubber, and the process for its production.  
 394,865 (Sept. 21). F. Lorthicis. Pneumatic tire.  
 394,886 (Dec. 10, 1907). H. R. Debroy. Manufacture of pneumatic tire covers from threads placed biaswise.  
 394,930 (Oct. 5, 1908). P. Günthor. Pneumatic tire covers.  
 394,959 (Dec. 12, 1907). E. Brousse. Tire.  
 394,987 (Oct. 7, 1908). L'Fluillier and Roye. Pneumatic tire cover.  
 394,990 (Oct. 7). C. M. Gautier. Machine for the manufacture of tire covers.  
 395,011 (Oct. 8). F. Wiechard. Pneumatic tire.  
 395,027 (Oct. 8). J. Blum and A. W. Carpentier. Process of manufacturing an artificial Pará rubber.  
 394,941 (Oct. 5). F. H. Hersmoth. Nipple for infants' bottles.

[NOTE.—Printed copies of specifications of French patents may be obtained from R. Bobet, Ingenieur-Conseil, 16 avenue de Villier, Paris, at 50 cents each, postpaid.]

## NEW TRADE PUBLICATIONS.

**BOSTON RUBBER SHOE CO.** (Boston) have issued a catalogue for the year 1909-10 of their rubber footwear, which is naturally a very complete publication, in view of their having been in operation for 56 years, and long since having attained a capacity of 55,000 pairs daily. Some attractive new styles illustrated in this booklet will prove of interest to the trade. This is probably the most attractive retail rubber shoe catalogue yet issued by any firm. The illustrations are particularly good. The catalogue embraces the "Bay State" as well as the "Boston" brands. [4¼" x 8¾". 56 pages.]

**ST. PAUL RUBBER CO.** (St. Paul, Minnesota) issue a catalogue of Druggists' Sundries and Rubber Specialties, which is one of the most complete catalogues in this line that we have seen issued by any jobbing house. Nearly every item is illustrated, colors being used when necessary, in addition to which there is sufficient descriptive matter, and prices are given. We do not remember to have seen in another rubber goods catalogue 10 pages devoted to smoking pipes, as in this case, but their inclusion appears to be justified by the fact that so many of the pipes described have rubber mouthpieces. [7¾" x 7¾". 152 pages.]

**W. D. ALLEN MANUFACTURING CO.** (Chicago) issue their Catalogue No. 25, devoted particularly to the firm's products as brass founders and brass finishers. It is full of items having relation to rubber goods—lawn sprinklers, hose reels and racks, hose nozzles, and such like goods. Some of their packings and other rubber goods also are listed. [6¾" x 9¾". 96 pages.]

**CHARLES MACINTOSH & CO., LIMITED** (Manchester, England), in their List No. 17, illustrate many attractive designs in rubber tiling, which they illustrate in great variety, plain and in color schemes. Special attention is given in this list to types supplied recently for use on some large steamers, [9"x11". 18 pages.] Also: List No. 15—Balloons for advertising purposes, "squeakers," toy balloons, and such like goods. [9"x11". 14 pages.]

**FIRESTONE TIRE AND RUBBER CO.** (Akron, Ohio) issue a more than ordinarily handsome booklet, entitled "Progressive Locomotion and a Story of Progress," being a brief history of the development of pleasure conveyances from the earliest times to the present, and, of course, leading up to the subject of rubber tires. [6"x9". 32 pages.]

**THE CINCINNATI RUBBER MANUFACTURING CO.** (Cincinnati, Ohio) issue their Catalogue B, of Mechanical and Special Molded Rubber Goods, which is fully illustrated, and relates to an extensive line of products. In addition to goods usual in such catalogues, they list fruit jar rings, typewriter platens, billiard cushions, and other specialties. [5¾" x 7¼". 96 pages.]

**THE RUBBER PRODUCTS RUBBER CO.** (Barberton, Ohio) issue their illustrated Catalogue D of Druggists' Sundries and Other Specialties, including an attractive line of water bottles and the rubber goods usual in this branch, in addition to air bags, toilet brushes, and plumbers' supplies. [6¾" x 8". 31 pages.]

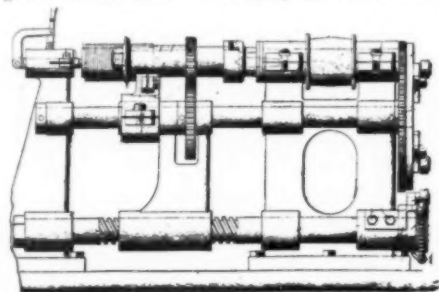
**THE GUTTA PERCHA AND RUBBER MANUFACTURING CO. OF TORONTO, LIMITED**, sent out on March 1 their Rubber Footwear Catalogue for the season of 1909-10, covering their "Maltese Cross" brand. [3½" x 6". 71 pages.] Also a net price list.

## ALSO RECEIVED.

**WILLIAM F. MAYO & CO., Boston.**—Rubber Boots and Shoes. Catalogue No. 2—March, 1909. [Goods at special prices, wholesale.] 40 pages.  
**The American Metal Hose Co., New York.**—Flexible Metal Hose in Steel and Copper. 19 pages.

## NEW RING CUTTING MACHINE.

THE illustration shows a new type of machine for cutting rings. It is described briefly as comprising a mandrel for supporting the tube and a rotary knife with an eccentric cutting edge, together with means for rotating the knife and for giving



PIANAROSA'S RING CUTTING MACHINE.

a transverse feeding movement to both knife and mandrel when that portion of its edge of least eccentricity is adjacent to the tube. United States patent No. 913,558 has been granted for this invention to Louis J. Pianarosa, of Boston.

## INDIA-RUBBER GOODS IN COMMERCE.

## EXPORTS FROM THE UNITED STATES.

OFFICIAL statement of values of exports of manufactures of india-rubber and gutta-percha for the month of January, 1909, and for the first seven months of five fiscal years, beginning July 1:

MONTHS.	Belting, Packing, and Hose.	Boots and Shoes.	All Other Rubber.	TOTAL.
January, 1909 .....	\$155,258	\$77,515	\$321,885	\$554,658
July-December .....	647,809	881,156	1,766,639	3,295,604
Total .....	\$803,067	\$958,671	\$2,088,524	\$3,850,262
Total, 1907-08....	844,811	1,252,153	2,209,938	4,306,902
Total, 1906-07....	691,286	858,714	2,040,592	3,590,592
Total, 1905-06....	738,000	1,238,837	1,626,020	3,602,857
Total, 1904-05....	530,538	971,261	1,338,168	2,839,967

A BRITISH patent [No 15,542—1907] issued to J. Ohm, Dortmund, Germany, relates to a substance prepared in the usual manner by the action of chromates on a mixture of gelatine and glue, to which, when in the liquid state, is added flaky graphite to prevent heating when used for the tires of motor cars and the like. Pieces of sea sponge may be added. To prevent this rubber substitute from drying up, there may be added a solution of pure Pará gum in nitrated linseed oil.



## New England Rubber Club's "Naval Night."

**T**HE ninth annual dinner of the New England Rubber Club, which was held at the Algonquin Club, Boston, on the evening of March 22, adds one more to the list of successful functions for which this association is notable.

After a preliminary half hour's social, members and guests gathered at the beautifully decorated tables and discussed a most excellent menu.

### PRESIDENT STEDMAN'S ADDRESS.

A preliminary to the first course was the standing toast "To the Commander-in-Chief of the Navy, President Taft." After the last course cigars were lighted, and President Stedman, calling the meeting to order, spoke as follows:

GENTLEMEN, MEMBERS OF THE NEW ENGLAND RUBBER CLUB, AND GUESTS: This, our ninth annual meeting, has been designated by your committee, as "Naval Night." While the so-called World Cruise of the American Squadron is still fresh in the minds of the people, and the skill of American seamen is the latest wonder and admiration of all naval critics, we have the honor to-night of entertaining distinguished representatives of that navy, and participants in that memorable achievement which has become an important part of our nation's history.

Aside from our feelings of patriotism and our pride as Americans, we of the rubber trade have a business interest in the navy.

A modern battleship is quite dependent upon rubber; the pulsing of the great engines is controlled by rubber valves and rubber packing. Without its electrical equipment insulated with rubber, the fighting and operating efficiency of a battleship would be reduced to such an extent that it would be practically helpless. This latter item alone, I am told, represents a cost in the most recent type of battleship, of nearly if not quite a quarter of a million dollars. We, therefore, have not only a patriotic but a property interest in that navy of which we are so justly proud.

From its beginning our American navy has stood for the highest chivalry, faultless diplomacy, the best in scientific attainment, the greatest fighting efficiency and has displayed to the world the finest type of American gentleman.

I put chivalry first, because when John Paul Jones, in 1774, resented the insult of an English officer to the virtue of American women, by knocking the offender down in the presence of his shipmates, he conceived the idea of an American navy in which he bore so heroic a part.

I put diplomacy next, because the American navy has never been the first to draw the sword. How many budding revolutions, infant insurrections, and international misunderstandings have been averted by our deep sea diplomats, only Washington knows.

In scientific attainment it has always led. In exploration, in the charting of hitherto unknown coasts, on deep sea soundings, in bulletins and monographs on winds, currents, cyclones, and scores of other subjects of great nautical importance, the American naval officer has been preëminent.

In fighting efficiency, man for man and ship for ship; history tells where we stand, and I have faith to believe that the great American public will insist that our navy, now the best, must soon be made the biggest in the world.

When our late President, Theodore Roosevelt, with masterful determination and foresight, projected the now historic world cruise, one of the leading and influential New York dailies said editorially, and repeated it day after day: "The entry of the fleet into the Pacific means war with Japan." Now, we all know that "If you see it in the Sun, it's so." The fleet entered the Pacific, it met and engaged the ships of Japan in Yokohama harbor, the victory was ours; a victory of peace. Our

ships have returned, bringing no battle scars excepting those caused by the broadsides of good will. May I say in parenthesis, that this cruise is acknowledged to be the most remarkable nautical feat the world has ever witnessed. How successful, and how remarkable, I trust, our guests will emphasize to us this evening.

In 1844 rubber was first introduced to the navy. On March 22, 1909 (which some of you may identify with this evening), the navy, by the presence of some of its most distinguished officers, is introduced to the rubber trade. We, of the New England Rubber Club, representing the trade as a whole, welcome them most heartily to our mess room.

During the late civil war, a soldier wandering through the grounds of the White House, met a tall clerical appearing man who asked him why he was not at the front. The soldier did not recognize the great Lincoln, and taking umbrage at the question, criticized him for hiding behind his clerical robes and thus escaping military service. The great man replied that service at the front was not always the service that tried men the most. There were mothers, wives, and children, and in too many cases, widows and orphans who sorely needed the spiritual advice and comfort of the man of God, and it perhaps took quite as much manhood to resist the calls of country and remain to comfort the deserted ones. So, too, in war and world cruises, there are things to be done at home. There are fortifications and harbors to be defended, there are ships to be made ready and repaired. The man who remains behind to protect the base of supplies, is equally as important as he who goes afar. Naval bases and navy yards are vital to the existence of the ships of war. Just as the man behind the gun determines its efficiency, so the man behind the navy yard determines the efficiency of the ships that carry the guns.

I have the pleasure of introducing our neighbor, Rear Admiral William Swift, commandant at Charlestown navy yard.

### REAR ADMIRAL SWIFT'S ADDRESS.

Rear Admiral Swift was received with great enthusiasm, and in a fifteen-minute speech had the undivided attention of all present. He said in part, that he had read in the April number of a magazine the writings of a New York cotton broker who seemed to be under the misapprehension that all the navy did was to protect the merchant fleet.

"The purpose of the navy," the speaker went on, "is the defense of the country it represents; the protection of commerce is simply incidental. In time of war it is little in comparison with the navy's main objective."

He said that during the Spanish war people with summer homes along the Atlantic coast seemed to think that the navy should protect their silverware. This showed a necessity for educating the people to the knowledge that the navy is for national defense and not private affairs along the coast. If the ships guarded the coast in such an event, they would be wasting time and losing advantages.

The fifteen-months' cruise had developed a wonderful state of efficiency and had made clear that the navy was equal to all the demands put upon it. Some people thought that in times of war this country could improvise military and naval forces, but the cruise showed clearly how well it was to keep up the training.

"It is the influence in times of peace," continued the rear admiral, "that does so much to prevent war."



REAR ADMIRAL WILLIAM SWIFT, U. S. N.  
[Commandant Charlestown Navy Yard.]



ARTHUR W. STEDMAN.  
[President New England Rubber Club.]

Japan did much in supporting the hands of the government of Japan and aided it in quieting the turbulent element that had been aroused by the sensational newspapers of Japan."

#### CAPTAIN SOUTHERLAND.

After a standing toast to the last speaker the president said:

An old Roman writer, describing the English race, spoke of them as "fierce sea wolves who bared their breasts to the gale and loved to triumph over tempestuous seas." One of our guests to-night, must be of the same hardy race, for he not only put to sea in the face of a north Atlantic cyclone, but lived to weather it and write upon it. His experiences are preserved in the naval archives at Washington under the modest title, "Nautical Monograph No. 4." I have the pleasure of introducing a veteran of the Spanish war, a naval author, and one who participated in the World Cruise, Captain W. H. H. Southerland, Commanding the U. S. S. *New Jersey*.

Captain Southerland is the possessor of a very delightful dry humor, and in his description of the evolutions and the daily and nightly drills through which the 16 ships were put he not only gave to the audience much information, but did it in such a way that ripples of laughter were constantly passing over the sea of interested faces. He described the 16 battleships as they assembled in Hampton Roads, when they were so many separate entities. Then he described the work that welded these ships into a fleet. He described searchlight drill, target drill, and all of the simpler evolutions, until those present almost felt as if they were taking part in the cruise. "To use Kipling's phrase," said the captain, "the ships had found themselves," and on the voyage were kept in repair at a cost but a trifle in excess of what would have been demanded at the navy yards had they remained at their stations, and far more important, the men were infinitely better prepared for real war. Then again, the ships at their return are found to be in better condition than when they left and are ready for service any time and anywhere.

#### CAPTAIN FLETCHER.

The next speaker, Captain Fletcher, was introduced as follows:

The student and scientist, and when necessity bids, the practical fighting man, is the United States naval officer of to-day. One of our guests has done notable work in all of these. I need only mention the deep sea soundings in the Pacific ocean in the year 1875, the determination of longitudes of the Central and South American coasts in the year 1883, and the successful command of one of our most modern battleships, the magnificent *Vermont*—Captain Frank F. Fletcher.

Captain Fletcher described the old navy and said that there had come a great transformation. Such a cruise as had been sailed by the fleet showed that great work is required in times of peace to make the navy strong.

A display of force, where it is adequate, is of enormous influence in securing the peace of the world. I believe that there have been times where serious trouble was averted by a movement of ships. Only a few of the inner circles would know and there would be no evidence that coercion was being used. The trouble would be speedily settled, however.

"I have no doubt that the visit of our fleet to

"It is the best of its kind," he said. "The best in construction and in machinery; it is well skilled and well arranged. The Japanese used a phrase in their reports of engagements in the war with Russia which is a new and a good one. It is: 'The evolution was executed as prearranged.'"

He then pictured what scientific prearrangement meant in the navy, and cited the experiences in this World's Cruise as being a most notable and practical type of far-sighted prearrangement.



FELIX HERMANN HUNICKER.  
[Late Captain, United States Navy.]

#### CAPTAIN DOYLE.

After a standing toast to the last speaker, President Stedman said:

A very significant fact about the American naval officer to-day is, that whether he be born north or south of Mason and Dixon's line, whether in command of the *Puritan* or the *Dixie*, he is wholly American, and there is no dividing line with him. One of our guests, a son of Tennessee, has not only done notable sea service in various parts of the world, but as inspector of ordnance and engineering material for the federal government, has acquitted himself with high honors. I will introduce Captain Robert M. Doyle, commanding the *Missouri*.

Captain Doyle caught the fancy of the listeners when he began by stating that although our ships cost much money, they were built in the United States, and we not only got the ships but kept the money, too. He described the voyage from San Francisco to Honolulu, to Japan, New Zealand, and Australia, and paid a high tribute to the good conduct of the men to whom shore leave was granted freely. The central point in his speech, however, was a description of the entertainment of the fleet in Yokohama harbor and in the city of Tokio. It was a succession of dinners, receptions, garden parties, drives, torchlight processions, and, most notable of all, a luncheon given by the Emperor of Japan to the commanding officers. He said that the effect of the visit to Yokohama and the overwhelming hospitality shown to every man there was that the Japanese were most sincere in their friendship for the United States. Continuing, he said: "What the navy needs is the intelligent interest of the people that they may realize how important it is to keep the navy up to a high standard of efficiency. We need to build new ships to keep pace with other nations. It is a cheap insurance and you don't have to die to realize from it. Build the ships here and you still have the money and the ships in this country."

#### COMMANDER LONG.

Lieutenant Commander Long was next introduced as follows:

It is with hushed voice and bated breath that I speak of the important service that our naval officers have rendered to our government in times of international complications. Diplomacy, keen observation, and an absolute forgetfulness of self are characteristic of the many services performed by officers of our navy. One of our guests, who is also from the fair and sunny South, is of this type. He has done much that I cannot, and he will not, mention. He bears the name of one much revered by us men of New England, the name of Long. I introduce Lieutenant Commander Andrew T. Long, executive officer of U. S. S. *Illinois*.

Lieutenant Commander Long explained that he was a little

out of practice, as on the cruise the admirals did all the speaking. He then emphasized the value of the cruise on other countries; for example, on Central American states that had in the past believed that the United States had but a few cruisers and those of an obsolete type. He said that the ability to use the strong arm of force was the best sort of peace insurance. After mentioning the wonderful receptions given to the fleet in Yokohama and in Sidney, he told of shore experiences in Colombo and of the special train that took the visiting officers up to Kandy, where they were most bountifully entertained.

PROFESSOR HOVGGAARD.

The next speaker was then thus introduced:

Naval architecture to-day calls for exceptional learning, the highest type of constructive ability, and thorough knowledge of seamanship. When our esteemed neighbor, the Hon. John D. Long, was secretary of the navy, he recommended as professor of naval design for the Massachusetts Institute of Technology, the leading authority in that line in the world, Professor William Hovgaard of Norway, whom I now introduce.

Professor Hovgaard briefly and in a scholarly way sketched the evolution of the American navy from the time of the wooden ship up to 1890, when we were equipped to build our own steel ships. He described the American invention, Harveyized steel armor, which added 25 per cent. to the strength of armor plates. He described the effect of the Spanish-American war on the American navy and the effect of the Russo-Japanese war in naval construction. He paid a high tribute to the versatility, not only of the commanders, but of the petty officers who were trained to know every particular of the great fighting machines on which they were stationed.

A telegram was received just before the dinner from one whom the whole club had hoped to hear, Captain Felix H. Hunicke, a veteran of the Spanish-American war, and to-day a member of the rubber trade. Serious illness in his family had prevented the captain from coming to Boston, much to the regret of those present.

#### NEPONSET SPLICING COMPOUND.

THE requisites of a first class splicing compound are permanently high mechanical strength, adhesiveness and dielectric strength, ease of manipulation and long life. It is claimed that these qualities are possessed in preëminent degree by the "Neponset" splicing compound. It is furnished in two standard thicknesses of .035 and .048 inch, on glazed muslin in one-half pound rolls, ¾-inch wide. It will stand a tensile stress of 500 pounds per square inch of cross section area, so that in winding it around a conductor or wire joint the manipulator may stretch it as strongly as may be necessary to make a tight, snug covering, without risk of breaking it from the pull.

- In addition to these properties it has the further features of excellence that no heat is required in its application. It thus combines ease of manipulation with the best electrical and mechanical qualities.

The adhesiveness of this compound thus is so great that moderate tension in winding the tape over a joint or conductor causes each successive overlapping layer to become an integral part of the whole, making a thoroughly watertight as well as waterproof envelope.

Its dielectric strength is high. A single thickness of the .035 inch tape will successfully withstand a puncture test of 10,000 volts. This renders it especially valuable and safe to use in high-tension transformers, joints on transmission lines, and in station wiring, and in all places where the circuits are liable to be subjected to high-potential strains due to lightning, surges on the line, and the like. Manufactured by the Massachusetts Chemical Co. (Wapole, Mass.).

A NEW edition of Mr. Pearson's "Crude Rubber and Compounding Ingredients" is now in press.

#### TIRES AT BOSTON AUTO SHOW.

THE seventh annual show conducted by the Boston Automobile Dealers' Association, under the management of Mr. Chester I. Campbell, was held this year as usual in Mechanics' Building, on March 6-13. Before this series of shows began there were automobile exhibitions in Boston, beginning with 1898, when automobiles were displayed as a feature of the Mechanics' Fair. The Boston show has become one of the yearly automobile exhibitions of national importance, and the one held this year excelled those of former years in extent and in the popular interest displayed. There were shown altogether 335 machines,

including chassis, in addition to 68 motorcycles and 6 bicycles, which indicates that a large number of makers were represented. It is to the Boston show that most of New England looks for the latest ideas in automobiles, and many sales result from it. The same applies to tires and other accessories which were also exhibited in profusion this year.

While, perhaps, four-fifths of the firms exhibiting at Boston had exhibited previously at New York or Chicago, there were newcomers, and, besides,



CHESTER I. CAMPBELL.

[Manager of the Boston Automobile Show.]

some of those who had been represented at earlier shows had novelties to offer. In this article, however, space can be given only to naming the tire and accessories exhibitors.

Shawmut Tire Co., of Boston, of which Mr. A. N. Hood, of the Hood Rubber Co., is treasurer, made their first appearance at any automobile show, and report themselves very well pleased with their success. Their exhibit included "Shawmut" pneumatic tires, tubes and tire accessories. They attracted attention, for one reason, on account of being Boston made, and for their proved claim to be made of "strong rubber and strong fabric."

The other leading tire makers were well represented, including the Ajax-Grieb Rubber Co., Batavia Rubber Co., The B. F. Goodrich Co., Commonwealth Rubber Co., The Diamond Rubber Co., Dow Tire Co., Empire Auto Tire Co., Firestone Tire and Rubber Co., The Fisk Rubber Co., Goodyear Tire and Rubber Co., G. & J. Tire Co., the Hartford Rubber Works Co., Michelin Tire Co., Morgan & Wright, Pennsylvania Rubber Co., the Republic Rubber Co., Rutherford Rubber Co., and Swinehart Clincher Tire and Rubber Co.

Atlas Rubber Co. (Buffalo, New York) exhibited their "Non-Puncture Inner Case," illustrated in THE INDIA RUBBER WORLD for February 1 [page 178]. The Doolittle demountable quick detachable rim, new this year, attracted considerable attention.

Voorhees Rubber Manufacturing Co. (Jersey City, New Jersey) exhibited their specialties; Leather Goods Tire Co., leather tires; Zeglan Bullet Proof Cloth Co., special tire fabrics, and Hopewell Brothers (Boston) a full line of tire cases.

The attendance was good throughout the week, and there was every indication that the Boston public is still interested in automobile shows.



## THE USE OF RUBBER IN THE NAVY.

THE successful completion of the recent around-the-world cruise of the American battleship fleet calls particular attention to the important part that electricity played in the successful navigation, the means of communication, and in the target practice of the ships.

Electricity in its various uses on board a modern warship is transmitted to every portion of the vessel through electric conductors covered with rubber insulation. There is not a signal exchange, a course altered, or a gun fired without the employment of electricity, and the successful completion of these maneuvers must depend entirely on the perfect quality of the insulated conductors.

Electricity came into prominence in our new navy with the building of the "White Squadron." Professor Terry, of the Naval Academy, in 1889, first took up the practical side of rubber insulations, seeing at that early date the important part they were to play in the navy.

The original specifications called for a copper conductor insulated with first pure and a rubber compound, free from sulphur, known to the trade as "White Core," over which was placed a vulcanized cover protected by a lead sheathing. With the continued advance of electricity for all purposes on board ship, the specifications were gradually changed until now, the navy department calls for three classes of insulated wire, known as "Lighting wire," "Bell wire" and "Cable." The general specifications called for first a layer of Pará rubber at least 98 per cent. pure, over which is placed a vulcanized coat, the compounding of which calls for at least 39 to 44 per cent. of fine Pará rubber. To show how important this rubber compound must be, the tests require that pieces of insulation be taken from the wire and subjected to a tensile stress that shall show a breaking strain of not less than 1,000 pounds per square inch, and that the material shall stretch to at least  $3\frac{1}{2}$  times its original length. When test pieces as described above are subjected to a stress of 900 pounds per square inch for 10 minutes, the compound shall be of such a character as to return to within 50 per cent. in excess of its original length at the end of ten minutes after being released. The insulation of the conductors is further protected by a cotton tape that is thoroughly filled with a rubber insulating compound. Besides being subjected to the mechanical test, the rubber must stand an electrical test of high potential "break-down" current of a maximum of 5,000 volts, after which the conductors are submerged in water and must show an insulation of approximately 1,000 megohms per knot.

These strict specifications show why many of the rubber manufacturers find it impossible to make high grade insulated wire, irrespective of their experience in other lines of rubber goods manufactured.

A brief summary of a battleship going into action, showing its dependence on rubber insulated wires, is as follows: The call is received by wireless through the rubber insulated lead, running to the antennae; the message is transmitted to the commanding officer over the interior communication cables; he then signals to the engine room directing the speed of the ship; the helm is then pointed in the right direction by electrical steering apparatus; the crews are summoned over telephone wires to their gun stations; the electrical ammunition hoists bring the projectiles to the guns and they are loaded with electrical rammers. In the meantime, the electric range finders have been searching for the enemy, and the position is transmitted over the telephone to the commanding officer in the conning tower. The guns being loaded are kept continually "on the target" by electrical means, and the commanding officer can, by electric transmission, fire them at will. If the action takes place at night, the electric search lights and "night signal" sets lend their aid.

It will readily be seen if, during this important time on a ship, any of the electric conductors should fail properly to carry the

current, that a wrong course, a mistake in engine signals or premature firing of the guns, might lead to the destruction of the vessel.

The great factor in naval training is quick maneuvering, and the speed with which the guns can be loaded and fired. The electrical apparatus gives advantage over the old hand system of loading of over 500 per cent.

The placing of these rubber insulated conductors on the ship must, of course, be given careful consideration. For this purpose steel tubing is used, placed well below the protective armored decks. Wherever the wires are connected with any of the various electrical apparatus, rubber bushings and glands are used to make the fixtures waterproof. A large amount of high grade rubber naturally is used each year in insulating the electrical wires and furnishing hard rubber for all parts of the insulation where flexibility is not required. As none of this rubber is ever "recovered," as is that used in mechanical goods, and as ships are usually rewired on an average of every three years, it will be seen that the navies of the world are constantly consuming a large amount of rubber which must enter into the consideration of producers of this article.

American manufacturers of rubber insulations in the field under review have not confined themselves to producing wires for the United States navy. During the late war between Japan and Russia ships on both sides of the conflict were equipped with conductors of American manufacture. The high state of the "art" reached by some of the factories in this country has been reported abroad by the military attachés in Washington and is gradually leading to the building up of foreign business.

While the application of rubber to electrical insulations is undoubtedly the most important use to which this material is put on board the modern warship, there is hardly any branch of the industry that is not represented on these floating fortresses. Among the important products, might be mentioned the floor coverings and tilings, and the packing and gaskets of the engine room.

Another important factor is gutta-percha and India-rubber impression sheets, with which a facsimile of the interior of the bore of the gun is taken to determine if any flaws or cracks have developed during firing. The material being plastic, readily takes an impression and when the sheet is withdrawn, an examination is made of it showing the exact location of flaws and if they are of such a serious nature as to place the gun out of commission.

Having seen how the rubber insulated wire industry and the mechanical rubber goods are represented in the navy, it is well to note that the rubber druggists' sundries also play a very important part in the "sick bay" of the ships, which, of course, is a complete floating hospital, to take care of the injured in case of necessity.

It has been stated by one of the commanding officers at the battle of Santiago that the use of rubber insulations on a ship during that engagement proved for the first time, in actual warfare, its great value and since then, the equipment bureau of the United States navy department has paid particular attention to various rubber industries relating to the construction of warships.

IRA W. HENRY.

## "WET FEET DONE IT."

HE was sitting in an electric car, by the side of his best girl, explaining how he caught the cold that gave an added huskiness to his gruff voice and an added crimson to his broad snub nose. "I believe it's gettin' my feet wet so much," he said. "I never thought of it 'til the other day when I seen an advertizment in one of the L trains that read 'Wet feet done it.' Then there was a spiel about wearin' rubber shoes made in Boston. I read the card two or three times; it just hit my case. 'Wet feet done it.'"

## Rubber Sundries Association Dinner.

IT was on March 25 of this year that the rubber sundries men of the United States met in New York in the forenoon to discuss business and in the evening for their annual banquet. For officers they elected this year, Henry C. Burton, of Parker, Stearns & Co., president; George B. Hodgman, of the Hodgman Rubber Co., vice-president; Frederick H. Jones, of the Tyer Rubber Co., treasurer, and Edward E. Huber, of Eberhard Faber, secretary.

At half past 7 about thirty members of important houses manufacturing rubber sundries gathered in one of the reception rooms at Delmonico's on the second floor and after a half hour's social filed into the red room, where the banquet was to be served. These banquets have been always notable as being unusually good, and in all their settings characterized by taste and elegance, and on the evening in question the reputation made in the past was not only lived up to but perhaps surpassed. The diners gathered about a great round table, the whole of which, except the outside margin where the covers were laid, resembled a tropical garden in its profusion of blossoms. Scattered through the flowers were cheerful Billiken statues of various sizes that grinned in grotesque good nature at the diners. A very beautiful and novel feature in the line of decoration was the hundreds of crimson rubber balloons that at different heights above the table swayed gently at every breath of air and reflected the softened light from the green-tinted candelabra. The menu was of Delmonico's best.

The speaking that followed the dinner was brief, occupying less than an hour. President Burton briefly reviewed the history of the Association for the year, and then introduced the editor of *THE INDIA RUBBER WORLD*. The next speaker was Mr. H. E. Raymond, of The B. F. Goodrich Co., who in a ten minutes' speech, punctuated by gusts of appreciative laughter, proved himself to be one of the cleverest after-dinner speakers that the

rubber trade affords. He was followed by Mr. Edward E. Huber, who read a brief, which in reality is the record of the Association for ten years, and is a matter of historic interest:

"In looking over the records I find that the first annual banquet was held in March, 1899. The first meeting, organizing the original association, was held on September 9, 1898, at the old Fifth Avenue Hotel. In this connection, and particularly because of the resolutions recently passed on the subject of the 'Return of Defective Goods,' I find that the old Association, under date of December 14, 1899, passed a resolution that no druggists' sundries goods, that were not mechanically imperfect, were to be accepted for credit by any manufacturer, and if they showed wear or had been in hand over a year, all manufacturers should refuse to credit such goods to customers. This resolution appears to have been passed at that time, but at the meeting of March 8, 1900, the subject of this resolution was further discussed, and it was deemed by some of the members who were not represented at the meeting of December 14 that it would be impossible for them to consider such a course, as the resolution was too broad, and that it was inadvisable to take such radical action. It was thereupon moved by Mr. Burton, seconded by Mr. Hodgman, that the resolution passed at the meeting of December 14, 1899, in the matter of refusing the indiscriminate return of druggists' sundries goods be rescinded.

"Evidently at that time the members of this association did not have that strength that has come to them since, and because of a better feeling among the associate members, as is evidenced by the resolution which was passed at our January meeting, and which appears to have filled a long felt want, and has been acknowledged by all as one of the greatest benefits that have been derived from a membership in this association.

"On October 3, 1901, I find a resolution that, owing to the ap-



BANQUET OF THE RUBBER SUNDRIES MANUFACTURERS' ASSOCIATION—DELMONICO'S, NEW YORK.

parent indifference of the members, the association disband, and this resolution was thoroughly discussed and unanimously carried.

"We all remember the strenuous times that we passed through during this period, and the efforts that were made to keep the association together, but unfortunately, at that time, some of our 'weak' friends feared the competition of the associate members and were lukewarm, which necessitated the disbandment of the association.

"I find on the records, also, that complimentary remarks were made by Mr. Jones, Mr. George F. Hodgman and Mr. Davol on the services rendered by the retiring president, Mr. H. C. Corson, who had filled the position during the entire existence of the original association.

"I also find a vote of thanks extended to our present president, Mr. H. C. Burton, for the untiring devotion to association matters which he so freely gave. He has not yet ceased in his devotion to association matters, and I think you will all agree with me that his election to-day was a substantial proof of appreciation on the part of the members of the value of his services.

"The reorganization of the present association took place on April 3, 1903. I had the honor, at that time, of calling the meeting to order, and Mr. Raymond was temporarily elected chairman, and I promptly side-stepped to the temporary secretaryship. Since the reorganization in 1903 I can cheerfully say that we have been an exceedingly happy family. We have all profited by being members of this association—have been in a position to freely discuss matters of interest to all members of the association, bettering conditions of business, and making competition among ourselves a pleasure.

"Associations of manufacturers in the same or kindred lines of business have been extended until almost every branch of the trade is associated in some shape or form for the benefit of all.

"I believe you will agree with me that interchange of ideas on a friendly basis, because of a membership in the Rubber Sundries Manufacturers' Association has benefited all of us in the betterment of conditions in the handling of our sales departments, and I hope will also be extended to our credit departments.

"In passing, I would state that in the new association our first president was Mr. Joseph Davol, who was reelected in 1904. He was followed by that man whom we all loved and respected, the late Mr. George F. Hodgman, in 1905, who was reelected in 1906. Our strenuous friend, Mr. Howard E. Raymond, succeeded in 1907, but because of the great demands made upon him in the various associations that his company is connected with, and the honors that have been heaped upon him as either president or vice-president of the various associations, in all of which he takes a very personal interest, he declined the reelection which was offered to him at the expiration of his terms, and our friend, Mr. Henry C. Burton was elected to succeed him in 1908 and again to-day. In spite of his infirmities, his interests in our association is so great that he practically came from a sick bed to attend the meeting to-day and to attend the annual banquet."

Following the speeches came a most excellent vaudeville show, embracing sleight-of-hand exhibitions, songs, monologues, dialogues by specialty artists, and clever impersonations, ending with a series of graphic moving pictures.

After a vote of thanks to the entertainment committee—which, as usual, consisted of Mr. George B. Hodgman and Mr. Edward E. Huber—the diners departed unanimous in the opinion that the banquet was the best yet.

Each year some artistic souvenir is presented to the diners. This time it was a beautiful bronze statuette of Abraham Lincoln, one of the works of art of the Gorham Manufacturing Co. This being the Lincoln centennial year it was most appropriate.

THE following is the guarantee officially adopted by the Rubber Sundries Manufacturers' Association:

"Any article which proves defective in workmanship or material will be replaced or credited, but the manufacturer will not assume responsibility for deterioration, nor for wear, nor for injury resulting from age, accident or abuse.

"No claims for defective goods can be considered unless the articles in question are returned for examination with transportation charges prepaid. On all goods so returned and found to be defective, replacement or credit will be made, and the transportation charges for their return will be included in the amount allowed.

"Neither credit nor replacement can be allowed except as provided by the terms of this guarantee."

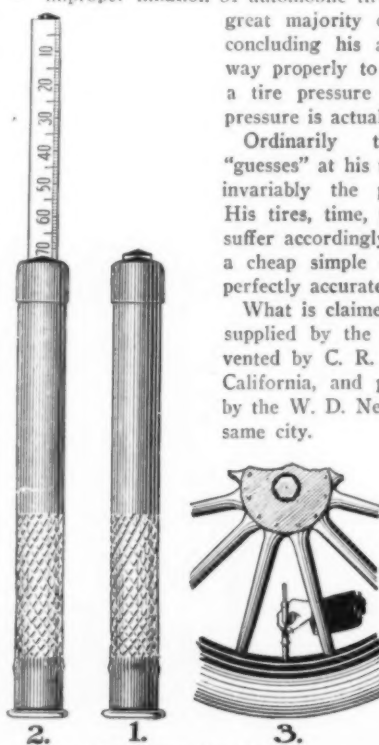
#### A NEW AIR GAGE FOR TIRES.

IN a recently published article, Hiram Percy Maxim shows how improper inflation of automobile tires is responsible for the great majority of tire troubles, and in concluding his article, says: "The only way properly to inflate a tire is to use a tire pressure gage to measure what pressure is actually in the tire."

Ordinarily the automobile user "guesses" at his tire pressure, and almost invariably the pressure is too small. His tires, time, patience and pocketbook suffer accordingly. The demand was for a cheap simple device which should be perfectly accurate and always available.

What is claimed to be such a device is supplied by the Twitchell air gage, invented by C. R. Twitchell, Los Angeles, California, and perfected and controlled by the W. D. Newerf Rubber Co., of the same city.

The accompanying illustration shows the Twitchell gage closed, extended and applied to an automobile tire. It is only 3½ inches long, can be carried in the vest pocket, and is always ready for use. It can be applied in two seconds, and the registration is instant-



TWITCHELL AIR GAGE.

aneous and guaranteed to be correct. It can be applied at any time and at any place, without inconvenience. It will not get out of order with any reasonable use.

It is claimed that the Twitchell air gage will save the automobile owner many dollars by enabling him to keep the air in his tires at the proper pressure; that it will lengthen the life of the tire and reduce susceptibility to injury to the minimum. The proper air pressure, according to the Newerf company, is 50 pounds for 2¼-inch tires; 60 pounds for 3-inches; 70 pounds for 3½-inches; 80 pounds for 4-inches; and 90 pounds for 4½.

GEORGE GERMANE COSSITT, who died on February 22 at Baranquilla, Colombia, aged about 65 years, was a nephew of Fred Cossitt, a wealthy citizen of New York, and had spent many years in promoting rubber planting plantations, the fine wood trade, and mining, in Mexico and Central and South America. He was mentioned in THE INDIA RUBBER WORLD several years ago as having a rubber plantation at Bluefields, Nicaragua, and was one of the first to stimulate in the United States an interest in rubber planting.



## New Rubber Goods in the Market.

### IRVING'S "PARADOX" INKSTAND.

**A**N advantage possessed by this recently patented inkstand is that it preserves all kinds of writing fluids in a perfectly free flowing state and almost entirely prevents evaporation. It is easily adjusted and readily cleaned. It works automatically; each dipping of the pen in the font causes the agitation of all the ink in the reservoir and the constant flushing of the ink keeps it clean, and the ink being

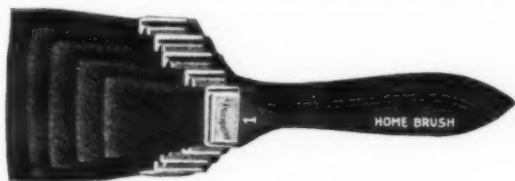


IRVING'S "PARADOX" INKSTAND.

drawn from the bottom of the reservoir, the collection of scum or dust is impossible. The reservoir proper is made of Pará rubber, specially preferred to meet the requirements. This special make of rubber bulb is procurable separately for 25 cents. Only a half minute is needed for inserting a new bulb; thus the life of the instand may be prolonged indefinitely. The other parts are all of metal, nickel plated. [The Smith & Egge Manufacturing Co., Bridgeport, Connecticut.]

### RUBBER SET "HOME" BRUSHES.

THE first brushes made of bristles set in hard rubber handles were for use in shaving, but gradually this principle of construction has been extended until brushes for a very wide



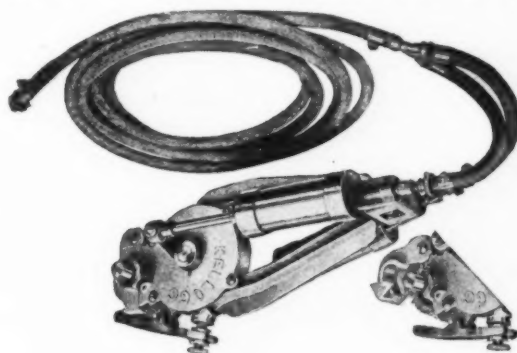
RUBBERSET "HOME" BRUSHES.

variety of uses are to be had. What are called the "Home" brushes are designed for lighter work in painting, enameling, staining and varnishing, and can be had in any size desired. [The Rubber Set Co., Metropolitan tower, New York.]

### QUICK DETACHABLE POWER TIRE PUMP.

THE Kellogg tire pump is designed to be attached to the engine of a motor car when air pressure is needed, and attached when not in use. The pump frame is cast hollow, in which there is located a spur gear. The pump cranks are attached one on each side of this gear. The end of the pump frame is provided with a hinged housing which can be opened or closed, attaching or detaching the pump. The

pumps are of the single action reciprocating type, delivering air to the tires through a Y connection and sufficient rubber tubing to reach all four wheels. Each pump weighs but 8



KELLOGG DETACHABLE POWER PUMP.

pounds. [The Wray Pump and Register Co., Rochester, New York.]

### "KLINGTITE" BATH SPRAYS.

THE distinctive features of "Klingtite" bath sprays are pointed out as follows (1) The "Klingtite" bulb will not blow off the faucet under the strongest pressure; (2) the hose is



"KLINGTITE" BATH SPRAYS.

internally attached at both ends, making separation impossible, and (3) the hose is of exceptional quality, and will not burst or kink under high pressure. [The James Manufacturing Co., Cleveland, Ohio.]

### TOY RUBBER BAGPIPES.

THE hit which the Scotch comedian, Harry Lauder, has made in the United States has been taken advantage of by



HARRY LAUDER TOY BAGPIPE.

the toy trade. A miniature bagpipe has been brought and is finding a good sale. It consists of two lengths of reed and a rubber bag and retails at 10 cent.

## NEWS OF THE TIRE TRADE.

THERE has been a final hearing in the long pending suit of The Single Tube Bicycle and Automobile Tire Co. v. Continental Rubber Works (Erie, Pennsylvania), in the United States circuit court for the western district of Pennsylvania. The suit is for alleged infringement of the Tillinghast patents on single tube tires for bicycles. Decision is expected within a few weeks.

James L. Gibney & Brother (Philadelphia), dealers in tires and distributing agents for "Continental" ready-flated and demountable rims have, in view of their steadily increasing business, leased for a long term the larger premises, Nos. 215-217 North Broad street, which they are occupying from April 1.

Cryder & Co., No. 585 Park avenue, New York, have been appointed sole agents in the United States for the Kempshall non skid tires, manufactured in England. These tires have been illustrated in THE INDIA RUBBER WORLD.

G & J Tire Co. (Indianapolis, Indiana) have appointed as manager of their Detroit branch Mr. Ralph P. Dawse, to succeed Charles A. Monson, who is going into the lamp trade.

John E. Thropp's Sons Co. (Trenton, New Jersey) announce that they are exclusive licensees under the Peter E. Thropp patent No. 822,561, dated June 5, 1906, for the manufacture of molds for curing tires in open steam. Five rubber companies have already taken licenses for the manufacture of tires by the use of these molds, and other companies may obtain licenses under like conditions. It is intimated that infringers of the patent referred to will be prosecuted.

A petition in bankruptcy has been filed against Pneu L'Electric Co., dealers in automobile tires, at No. 238 West One Hundred and Eighth street, New York, and Charles L. Cohn has been appointed receiver. The company was incorporated under the

laws of New York July 26, 1907, with an authorized capital of \$200,000.

## A SUIT WON BY THE GOVERNMENT.

A FURTHER decision has been rendered in the federal courts bearing upon the rate at which automobile tires should be dutiable when imported into United States in connection with, but not mounted upon, automobiles. The Auto Import Co. and other importers at New York protested two years ago against the payment of duty on certain automobiles as an entirety at 45 per cent. *ad valorem*, on the ground that the tires, not being mounted, should be admitted as manufactures of india-rubber, on which the rate is only 30 per cent. The collector at New York was upheld by the board of United States general appraisers whose decision the Auto Import Co. and Archer & Co. asked to have reviewed by the United States circuit court for the southern district of New York. Here the decision was adverse to the government. The matter was carried next to the United States circuit court of appeals, second circuit, where a decision has been rendered, reversing that of the circuit court and sustaining the collector of customs and the general appraisers. The gist of the latest decision is: When an incomplete automobile car and the four tires necessary to put it in running order are imported together, in the same vessel, by the same importer, and entered at the same time, the parts are dutiable as a whole, though before the machine is ever used other tires may be substituted. [See THE INDIA RUBBER WORLD May 1, 1907—page 244; August 1, 1908—page 375.] The latest decision is dissented from by one of the judges, Noyes, who says: "I cannot agree that rubber tires should be assessed as manufactures of metal merely because they are imported in a crate with an automobile upon the wheels of which they never have been, and it is wholly problematical whether they ever will be, placed."

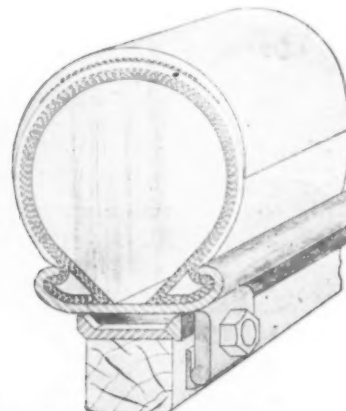


BASKET WEAVE MOTORCYCLE CLINCHER TIRE.  
[Morgan & Wright, Detroit, Michigan.]



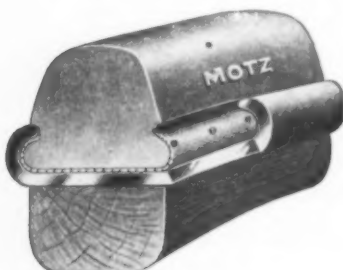
SWINEHART BRIDGE TIRE.

[Bridges in the sides of the tire, in the form of cylinders, which flatten out in use, take up shocks and stand a great amount of abuse without cutting or tearing the tire proper. Swinehart Clincher Tire and Rubber Co., Akron, Ohio.]



FIRESTONE DEMOUNTABLE RIM.

[For pneumatic tires—clincher or quick detachable. Regular inner tubes used. Firestone Tire and Rubber Co., Akron, Ohio.]



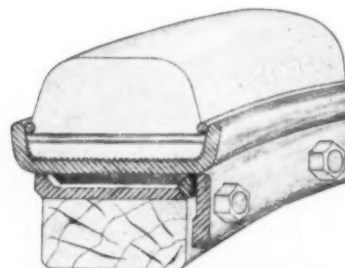
MOTZ MOTOR BUGGY TIRE.

[Clincher type. Held in rim by steel cross bars placed slantwise in the base of the tire, the ends of the bars extending under the flanges of the rim. Motz Clincher Tire and Rubber Co., Akron, Ohio.]



CORRUGATED MOTORCYCLE TIRE.

[G & J Tire Co., Indianapolis, Indiana.]



SIDE WIRE TIRE DEMOUNTABLE RIM.

[For use on commercial motor vehicles. Shown for the first time this season. Firestone Tire and Rubber Co., Akron, Ohio.]

## The Late Harry D. Warren.

THE rubber trade throughout the world will learn with profound grief of the death of Mr. Harry D. Warren, president and treasurer of the Gutta Percha and Rubber Manufacturing Co. of Toronto, Limited, which occurred at his residence, "Red Gables," in Toronto, on March 5. He had been ill for some time, and had undergone two operations, but his recovery was confidently looked for.

Mr. Warren was born May 8, 1860, in Brooklyn, New York, being the son of Dorman T. Warren, who is now a resident of New York City. His education was completed at Princeton University, after which he accepted a position with The Gutta Percha and Rubber Manufacturing Co., of New York. Forty years ago Dorman T. Warren and the late Amedée Spadone were both engaged in the jewelry business in New York in the same building, No. 4 Maiden lane, though not associated. They became friends, however, and both joined the board of directors of the rubber company last named. Later Mr. Spadone was elected president of the company, which position he held for 36 years. The company organized a selling agency in Canada, which was followed by the establishment of a branch factory at Toronto, the business of which, in 1887, was incorporated in Ontario as The Gutta Percha and Rubber Manufacturing Co. of Toronto, Limited. Harry D. Warren had meanwhile gone to London to represent there the Otis Elevator Co., in which his father was a director, but in 1887 he returned to America, to accept the management of the Toronto business. In time the New York and Toronto companies became entirely distinct, Mr. Spadone relinquishing all interest in the one, and the Warrens in the other, and Harry D. Warren was thereafter the head and guiding spirit of the Toronto business until his death.

Mr. Warren was for several years a director of the Canadian Bank of Commerce, and associated in an official capacity with various other companies and organizations. He was a member of the leading clubs of Toronto, Montreal, and Ottawa. For many years he occupied a high position in social and financial circles in Toronto, where he was most highly esteemed, and his death is a loss to the rubber industry generally, the city in which he lived, and the country in which he chose to make his home and in which his large interests were centered.

Mr. Warren was a member of St. Simon's Anglican Church, and is survived by a widow and five children. His will provides that the business of the rubber company, in which he held a controlling interest, is to be continued precisely as heretofore. Mr. Charles Newton Candee, the secretary of the company, long associated with Mr. Warren, also began his business career with the Gutta Percha company of New York.

The following tribute penned by one who was associated with Mr. Warren in business and had long known him well illustrates the appreciative regard in which he was held:

"When Mr. H. D. Warren died there went from among us a generous heart, a keen and kindly mind, a merchant and citizen

of high ideals. It is not given to many to possess his quick insight and rare individuality, still less to establish for themselves such a lofty interpretation of commercial ethics. His manifold interests brought him in touch with all sorts and conditions, and to all he was fair and courteous. A perfectionist in mode and manner, he added to other gifts a personal and distinctive magnetism, which impressed itself alike upon his social equals and his dependents. His business, and it was a large one, was governed by standards which are too often deemed incompatible with financial success, standards of rigid integrity, not only of action, but of thought. The progress made by the undertakings which he guided did but reveal to him an ever increasing degree his responsibility to his fellowman for his stewardship.

"Like the leaven in the loaf, he revived and permeated what he touched, a personality too unique not to be recognized and felt. Impatient and scornful of cant or humbug, his deeds testify to his deep regard for the welfare of his city and its inhabitants, and into many a mind on hearing of this most untimely death will come the memory of good acts performed in modest silence."

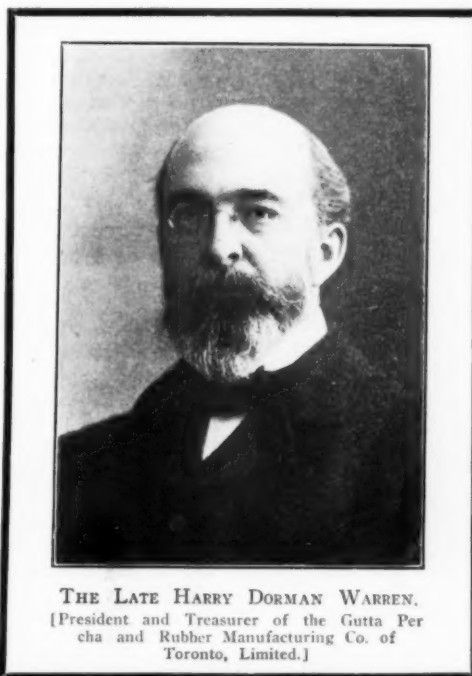
### TUBING MACHINES.

THE principle on which the first rubber tubing machine was constructed is still followed, nothing superior having ever been found, says a little book on the subject lately published; but the application of this principle is so much better understood and so many changes in detail have been made that the latest tubing machines, though following the general lines of the earlier type, so far excel them in productive capacity and general usefulness that the change from the old machine to the new is of more economic importance than the first radical change from hand work to machine manufacture.

The modern machines in this line have been given wide range and adaptability. It is pointed out, for example, that with a single perfected tubing machine, and a limited amount of extra equipment, it is possible to make plain, corrugated and soap-stoned tubing, solid cords, rods and special forms, wagon tires, multiple tubes, and wire and fabric insulation.

The book referred to, "Tubing and Insulating Machines," comes from John Royle & Sons (Paterson, New Jersey), whose business was established in 1860 in the manufacture of machinery. Gradually one line after another was added, and in 1881 they began the building of rubber tubing machines, which has now become one of their most important branches. This book describes the various styles of such machines, including the numerous items of equipment to fit them for various products. Another department is the manufacture of insulating machines, which they carry out on a large scale. Likewise they manufacture circular looms for the weaving of hose jackets, which is closely associated with the manufacture of rubber hose lining.

This is a handsomely bound volume of 195 pages.



THE LATE HARRY DORMAN WARREN.  
[President and Treasurer of the Gutta Percha and Rubber Manufacturing Co. of Toronto, Limited.]



## The Rubber Trade in the Dominion.

### CANADIAN CONSOLIDATED RUBBER—ANNUAL.

AT the annual meeting of shareholders of the Canadian Consolidated Rubber Co., Limited, at Montreal, on February 26, with Mr. D. Lorne McGibbon, president of the company, in the chair, the directors presented a very favorable report. Commenting upon the report, President McGibbon stated that while the year's trading had been in smaller volume than in some previous years, it had been above the \$5,000,000 mark. The company now had ample working capital, and its affairs were in good shape. He could announce that the payment of dividends on the common stock at the rate of 4 per cent. per annum would begin on April 1, the first disbursement amounting to \$28,000. The report of the directors said, in part:

"The promise of a successful year, which your directors felt justified in predicting at your last annual meeting, has been fully realized, and the statements about to be presented to you show that the condition of the company is, in all respects, an excellent one.

"The company has acquired, during the past year, twenty-two shares of the Canadian Rubber Co. of Montreal, Limited, making 19,118 shares out of a total of 20,000; but, apart from that, the assets and liabilities remain practically unchanged.

"The company's income, derived from dividends and from other sources, amounted to \$356,749.77, which, after providing for the payment of the interest of the bonds of \$150,738, preferred dividends of \$136,131.50 and general expenses of \$36,493.98, leaves a balance of \$33,386.29 to the credit of profit and loss to be carried forward to next year.

"The volume of rubber business, in common with practically all other lines of commerce, showed a decrease for the year 1908, which was, however, partially offset by a reduction in the price of crude rubber. By judicious purchasing your directors were enabled to take advantage of this condition, and this, coupled with a policy of rigid economy in the manufacturing, selling and administrative divisions of the consolidated and subsidiary companies, has resulted in bringing their total net profits up to \$806,675.66, from which the sum of \$286,869.50 has been paid out in bond interest and dividends, leaving a balance of \$519,806.16, which is left in the treasuries of the various companies."

Mr. McGibbon's statement that his health had been restored after six months' leave of absence, and that he would be able now to devote his whole time to the business of the company, was received with much satisfaction.

The election of directors resulted in the choice of Messrs. D. Lorne McGibbon, G. W. Stephens, J. H. McKechnie, James Robinson, Alexander Pringle, C. C. Ballantyne, V. E. Mitchell, D. Coulson, E. W. Nesbitt, W. R. Allan, and Shirley Ogilvie. The election of officers resulted:

*President and Managing Director*—D. LORNE MCGIBBON.  
*Vice President*—Major GEORGE W. STEPHENS.  
*Second Vice President*—J. H. MCKECHNIE.  
*Chairman Executive Committee*—JAMES ROBINSON.  
*Secretary-Treasurer*—WALTER BINMORE.

The quarterly dividend of 1¼ per cent. on the preferred shares of the company was payable April 1.

### THE NEW RUBBER SHOE LISTS.

BEGINNING with March 1 the rubber footwear manufacturers of the Dominion have abolished gross lists and the system of discounts in quoting to jobbers, as was intimated would be the case in THE INDIA RUBBER WORLD, February 1, 1909 (page 182). One of the leading manufacturing concerns writes:

"The principal reason why the rubber shoe manufacturers of Canada adopted 'net prices' in selling their goods was that the retailer got the notion into his head that they must sell at the

catalogue list prices. Therefore, when the discounts shortened up to say 20 per cent. off they blamed the manufacturer for not allowing them a larger profit. The manufacturers never had any idea of fixing the selling price to the consumer when making their catalogue price. You remember, when the discount to the retailer was 30 and 5, 30 and 10, etc., which was very satisfactory to the retailer, that he could show the list and explain to his customer what a bargain he was giving in selling him below the list price. The net prices have met with the approval of the whole trade, jobbers and retailers. We will do this season as the United States Rubber Co. have been doing recently—issue our catalogues without any list price, enclosing a little booklet with the net prices. The United States Rubber Co. use with their catalogue two booklets, one with a net list and one a gross list, but we have decided to break away from the gross list altogether."

A retailer in Toronto writes: "In my opinion the change from list and discount to net prices will be beneficial to the trade in general. My reasons are: Many complain as to the difficulty in rapidly figuring the cost in the discount system. Again, mistakes are apt to occur, and have occurred on the part of those not so familiar with mathematical calculations as others. Besides, as the rubber business is part of the shoe business, and now that all or nearly all shoes are sold upon a net basis, I think rubbers should be also."

### BRIEF MENTION.

THE annual meeting of the Wholesale Rubber Boot and Shoe Association of Canada, at Montreal, on January 20, was marked by the largest attendance in its history. After a full discussion the sentiment of the association was found to be in favor of the selling of rubber footwear at net prices. Thus is removed any suggestion that the wholesale houses fix the price for the consumer, and the retailer is free to fix his own selling prices according to local conditions. Philip Pocock, of London, Ontario, was elected president, succeeding Clarence F. Smith. Joseph Daoust, of Montreal, and N. L. Martin, No. 64 Wellington street, Toronto, were re-elected treasurer and secretary, respectively.

Mr. Walter Binmore, recently elected secretary-treasurer of the Canadian Consolidated Rubber Co., Limited, has held for a number of years the office of general manager of the Maple Leaf Rubber Co., at Port Dalhousie, Ontario. On leaving his former post Mr. Binmore was tendered a banquet by the members of the office and the warehouse staffs.

Mr. Alexander Macpherson, long connected with The Gutta Percha and India Rubber Manufacturing Co. of Toronto, Limited, is now president of The Hough Lithographing Co., Limited, of Toronto.

### INDIA-RUBBER AND THE SAILOR.

THE sailor taking a fine new rubber band from the stationery display began to chew it with vigorous enjoyment.

"What are you up to there?" snarled the druggist.

"Just chewing rubber," said the sailor. "It's a habit with all us navy fellers. Keeps off gun headache. Of course, you, a land lubber, don't know nothin' 'bout it, but let me tell you, mate, when a sixteen inch gun goes off, aboard ship, the jar shatters winders, splits planks, and brings your lower teeth up against your uppers like a straight left from old John L. The result is a gun headache; such a headache! But if you chew a rubber in firing time it eases off the shock and you don't suffer none. I been chewin' it steady ever since Manila bay.

"Rubber chewing is the salvation often."

F. J. K.

## THE RUBBER TRADE AT AKRON.

BY A RESIDENT CORRESPONDENT.

THE prominence of Akron as a tire making center has been indicated by a count of the tire equipment on cars exhibited at all the automobile shows during the past season. Four Akron companies are stated to have supplied the tires on 60 per cent. of the cars appearing at fifteen shows held since January 1. Out of a total of 2,039 cars, 1,371 were equipped with quick detachable rims, and in this line also the Akron manufacturers have predominated largely.

The Akron rubber trade is anticipating an unusually early motoring season this year, on account of the open winter, and partly on account of the depression in the automobile business in 1908. They are making preparations accordingly, and all attention is now turned toward the distributing agencies and the branch stores of the various tire making companies. There has been an unusual extension of selling facilities for the present season, and a large number of new branches and agencies have been established.

\* \* \*

THE close of the long-continued litigation between the Goodyear Tire and Rubber Co. and the Consolidated Rubber Tire Co. was recorded in March, when the United States supreme court for the second time denied a petition for *certiorari* (a writ for review) in the Grant patent case. The Rubber Tire Wheel Co. (now included in the Consolidated Rubber Tire Co.) sued the Goodyear company in the United States circuit court for the northern district of Ohio, eastern division, alleging infringement of patent No. 554,675, issued to Arthur W. Grant for solid rubber tires for vehicles. The decision and opinion of Judge Wing were in favor of the plaintiffs. The case was appealed, however, to the United States circuit court of appeals, sixth circuit, and after a hearing before Judges Lurton, Day and Severens, at Cincinnati, in an opinion written by Judge Lurton and filed May 6, 1902, the decree of the circuit court was reversed. [Details of this case have been reported fully from time in THE INDIA RUBBER WORLD, as well as the litigation over the same patent in other circuit court jurisdictions, resulting in conflicting decrees. This case has afforded a strong argument for the creation of a special court of appeals for patent cases, a bill for which is now pending at Washington.—THE EDITOR.]

\* \* \*

F. A. SEIDERLING has begun an infringement suit against the Standard Universal Rim Co., of Columbus, in the United States circuit court, eastern division of the southern district of Ohio, at Columbus. The petition charges infringement of the Seiberling patents covering Goodyear rims. Five patents are involved, covering the features of a reversible side ring, a spreader, and a split lock ring. The Goodyear company have been manufacturing this rim since 1905. The Standard company is a new concern.

The Goodyear Tire and Rubber Co. are manufacturing a new non-skid tire, with what is designated as a "Block" tread. The surface of the tread is covered with blocks,  $\frac{3}{4}$  of an inch square, and raised 3-16 inch above the surface. The company have been experimenting with the tire on the New York taxicabs and will now place it on the market extensively.

\* \* \*

TIRE manufacturers are watching with interest the result of the completion by the Goodyear Tire and Rubber Co. of a tire making machine. The device was invented by Frank A. Seiberling, president of the company, and after a long period of experimentation, the company has installed four of the machines. They are claimed to be an improvement over the machines of foreign make and are said to be capable of making perfect tires at the rate of fifty a day, when operated by a workman of average skill. It is claimed that they will make large size tires as fast as those of smaller dimensions, and afford an even tension

throughout the construction. The officers of the company declare themselves satisfied with the results of the machines and are preparing to install four more. It has been understood for some time that the Diamond and Goodrich companies have also had their experts at work improving the foreign machines, but as yet no announcement from them has been made.

\* \* \*

THE B. F. Goodrich Co. announce a new motorcycle tire which they claim possesses the strength of an automobile tire, combined with the resilient features of a bicycle tire. The company have manufactured a number of tires for motorcycles, but in this latest type they believe they have perfected a design that will answer all the requirements of two-wheeled motor vehicles. It is built by the same method that is used in making an automobile tire, and is designed with a rib tread.

\* \* \*

THE Firestone Tire and Rubber Co. have established a district agency in Baltimore at No. 518 West Baltimore street, in charge of W. Milton Norris. About the middle of March they opened a branch in Cleveland at Nos. 918-922 Euclid avenue with W. A. Harshaw manager. An unusual feature of the Cleveland branch is a garage for commercial and pleasure vehicles.

Mr. H. S. Firestone, president of the Firestone Tire and Rubber Co., accompanied by Mrs. Firestone, is expected to return from a tour of the South by April 1. They left February 24 and have traveled as far as Cuba and the Bahama Islands, incidentally taking in the Ormond and Daytona automobile races.

## THE RUBBER TRADE IN SAN FRANCISCO.

BY A RESIDENT CORRESPONDENT.

THE business situation this month is much more favorable than last month. The rainy weather is over, and the fine weather is directly responsible for the opening of a lively business. The rubber establishments depend most largely on the business from interior sections, and the country districts are prospering to a marked degree. Conditions in the interior are, generally speaking, better than in San Francisco. There is still some complaint to be heard among the general lines of business in the city, and there is still the cry of money scarcity and unemployment of labor, but with the rubber houses who are getting in big orders from the country all say they are doing well. Conditions in San Francisco are unsettled, owing to the fact that there is a continued movement of retail merchants back to the oil-tire retail district, and even the wholesalers are not entirely settled.

The Pacific Coast Rubber Co., a western firm which has four branch stores in the Pacific northwest as well as in San Francisco, has made a change in the control and management of the San Francisco establishment. Mr. H. C. Norton, president and manager, has severed his connection with the firm, and is now preparing to associate himself actively with the American Rubber Manufacturing Co., in which he also owns an interest. This latter concern has its headquarters in Oakland, across the bay, and Mr. Norton will probably make his headquarters there in future. Mr. Bushness, who was also with the Pacific Coast Rubber Co. in San Francisco, has gone with Mr. Norton over to the American company, and it is understood that he will hereafter handle the water front business for that firm.

The new manager for the Pacific Rubber Co. is Fred S. Winslow, who has been associated with the San Francisco branch during the past four months as general salesman. Prior to that he was for many years identified with the wholesale hardware business so that he has a thorough acquaintance in that line. The selling force of the company's San Francisco branch has been increased. A larger stock is being carried, and improvements will be made in the arrangement of the store at No. 416 Mission street.

Mr. U. R. Grant, formerly with the Gorham Rubber Co., has

returned from his trip among the factories in the East where he engaged in the selection of some choice lines, and on his return he became identified with the Eccles & Smith Co., who have taken in Mr. Grant for the purpose of opening up their new mechanical rubber goods department. The two principal lines he is starting with are the New Jersey Car Spring and Rubber Co., of Jersey City, of which they have the agency on the coast, north of Bakersfield, California, and interlocking tiling of the Goodyear Tire and Rubber Co., of Akron. Mr. Grant and Mr. George Sweeney will do the "hustling" for the new department. The Smith & Eccles Co. have branches in Los Angeles, San Francisco and Portland, and are figuring on putting in another at Seattle.

Mr. J. J. Fields, Jr., president of the New Jersey Car Spring and Rubber Co., is now visiting on the coast, spending some time at Paso Robles Hot Springs, and coming on to San Francisco shortly.

The Bowers Rubber Works have been turning out a large quantity of the new hollow edge conveyor belt, for which a patent has been secured by Brooks & Bateman, of San Francisco. The edges of the conveyor belts are turned and molded, so that there is a large hollow tube on each edge, the tank being even with the back of the belt and coming up on the upper side so that the belt forms a trough. It has the advantage of being able to be run flat, without bending like the ordinary conveyor belt, and the edges being hollow, they do not break on the turn. They are also making a concentrator belt with the hollow edge. T. R. Brooks, of the latter firm, who is also manager of the mining department of the Risdon Iron Works, will make a trip east this spring with his new belt.

Messrs. R. H. Pease, Sr., and R. H. Pease, Jr., president and treasurer of the Goodyear Rubber Co., are now making their usual spring trip through the eastern states. Mr. Runyan, the secretary, reports that business is beginning to pick up, the heavy rains having started an increased prosperity for both the mining and agricultural industries.

Francis A. Hardy, president of The Diamond Rubber Co., of Akron, is now visiting at Del Monte, California, and will come on to the company's branch at San Francisco. He is accompanied by W. B. Miller, secretary of the company, and on the arrival of Mr. Miller it is probable that the retail branch store of this firm on Golden Gate avenue will have its permanent location selected. C. E. Mathewson, Pacific coast manager, has returned from Seattle, Wash., where he opened a branch store for the company.

Mr. John H. Kelly, of the Republic Rubber Co., accompanied by Mr. Hendrie, of their Denver branch, has just paid a visit to the western representatives, the Phoenix Rubber Co. He was well impressed with the conditions generally and with the way his tires are gaining a foothold.

Mr. L. L. Torrey, manager of the Pennsylvania Rubber Co.'s local branch, reports that business is 50 per cent. better this month than it was last year at this time, and that collections are very fair.

William J. Gorham, president of the Gorham Rubber Co., is now down in Los Angeles, where his firm has a branch store, which is reported as doing the biggest automobile tire business it has ever known. Mr. Parish, of San Francisco, also spent a few weeks in Los Angeles. This firm is doing a big business in its fire department, having obtained lately a \$25,000 order from the city of San Diego; another for a motor chemical engine for Pasadena; good fire hose orders from Marsfield and Bandon, Oregon, and so on along the coast.

**RUBBER IN SUSPENDERS.**—In the latest styles of men's suspenders, the New York *Sun* hears, there is less rubber than formerly. The elastic is confined to the back straps. The suspenders composed largely of elastic have been found to stretch and get out of shape largely from the heat of the body.

## ATLANTIC CABLE BUSINESS.

THE annual report of The Mackay Companies for the year ended February 1, 1909, shows smaller earnings, but on account of the more economical operation the customary dividends have been declared. The corporation owns all or part of the stock of 102 cable, telegraph, and telephone companies in America and Europe, including the entire capital of The Commercial Cable Co. and the Postal Telegraph system. The income for 1908, described as "from investments in other companies," was \$3,685,761.91. The dividends—4 per cent. on both preferred and common shares—aggregate \$3,655,216. The lessened income is attributed to the general business depression during part of the year, and the interruption of submarine cables of The Commercial Cable Co. by trawlers, the prevention of which troubles is now being studied by a British government commission.

In view of a demand in some quarters that the transatlantic cable rate be reduced below 25 cents a word, the present figure, George Gray Ward, vice president and general manager of The Commercial Cable Co., has issued a statement to the effect that the company's business could not be conducted at lower rates than are now charged. It is stated in his report that 98 per cent. of the cable messages now transmitted are in cipher code, and it is estimated that each code word represents on an average 20 plain words, so that cablegrams in code bring the rate down to less than 2 cents a word for the translated message. Another point made is that because of the difference in time between Europe and America the business hours common to both countries are only a small part of the day. But for the necessity of transmitting so much business within three or four hours each day Mr. Ward says that one-half of the present number of Atlantic cables would be sufficient to carry all the traffic now offered. Mr. Ward says: "The Atlantic cable rate is the lowest cable rate in the world except where a government pays the deficit by taxes."

## THE GERMAN CABLE TO BRAZIL.

An important amount of gutta-percha will be required for the new cable now building in Germany to connect that country with Brazil. The Brazilian government has granted a concession to the Felten & Guillaume-Lahmeyer-Werke Actiengesellschaft, of Mülheim on Rhine, to lay a cable from either Pernambuco or Maceio, in Brazil, to Tenerife island, in connection with which arrangements are to be made with the South American Cable Co. to the west coast of Africa, the cable to Brazil to be in operation within three years from October 27, 1908. For the operation of this cable there has been formed at Cologne, Germany, the Deptsch Sudamerikanische Telegraphen Gesellschaft with a capital of 4,000,000 marks [= \$952,000]. The German government, it is understood, will grant a subsidy to the concern which will guarantee the interest and the amortization of the debentures which it may issue. The cable is to be manufactured by the important company the works of which, at Nordnham on Weser, were described in THE INDIA RUBBER WORLD January 1, 1908 (page 109). A fact which makes this information of interest to the trade in general is the connection with the German cable interest of Herr Franz Clouth, the important rubber manufacturer of Cologne.

## PROGRESS IN WIRELESS TELEGRAPHY.

ABOUT 70 British-owned ocean going steamers are now equipped for wireless telegraphy, and the Board of Trade is reported to be about to recommend legislation requiring all British-owned ships to be so equipped. The Brazilian government is reported to have ordered four land stations to be equipped with the Marconi system, in the neighborhood of Rio de Janeiro. The Norddeutscher Lloyd steamers have 17 Marconi installations at work.



## News of the American Rubber Trade.

### RUBBER SHOE FACTORIES RESUME.

THE rubber shoe factories for the most part will resume operations actively with the beginning of this month, which marks the beginning of the business year in this branch of the trade. During the past winter the factories were operated with much less than the customary regularity, owing to the unfavorable weather conditions which, during the earlier part of the winter, caused a lessened demand for rubber footwear. During March, however, most of the factories were in operation, so that a shut-down of only a week prior to April 1 occurred in the case of most of them, for the purpose of the annual inventory customary at the end of the business year. As a rule the grinding of rubber will begin on Monday, April 5, and work will be resumed in the various departments day by day, so that the factories will be in full operation before the end of the week.

### RUBBER SUBSTITUTE FACTORY BURNED.

THE factory buildings at Fairfield, Connecticut, of Tyson Brothers (Robert E. and William H. Tyson), makers of rubber substitute and supplies, were entirely destroyed by fire early on the morning of March 6. The origin of the fire is unknown, but it is supposed to have started from a back draft from the furnace. Owing to the inflammable material in stock the fire soon gained such headway as to be beyond the control of the local firemen. Tyson Brothers speedily secured another plant at Stamford, Connecticut, and already are in a position to fill orders, of which they have a very satisfactory number in hand.

### AFFAIRS OF EUGENE ARNSTEIN.

IN the matter of the bankruptcy of Eugene Arnstein, manufacturer of rubber cements, in Chicago [see THE INDIA RUBBER WORLD, March 1, 1909, page 225], a meeting of merchandise creditors was held in Chicago on March 5, at which was appointed a committee to examine into the assets and to protect the merchandise creditors. The chairman of the committee is T. R. Palmer, president of the Continental Rubber Works, Erie, Pennsylvania. It appears that the merchandise liabilities amount to \$133,000, and that there is owing to the banks and others \$110,000, in addition to a claim of a former employé for \$40,000, with which latter item the creditors' committee desire to take no action. Counsel for Mr. Arnstein have submitted to creditors a statement showing liabilities of \$290,500 (including the claim of the former employé) and assets of \$217,000.

### RECENT ANNUAL ELECTIONS.

THE Cincinnati Rubber Manufacturing Co. (Cincinnati).—J. M. Crawford, president; Fred A. Geier, vice-president; S. D. Baldwin, treasurer and general manager; F. D. Scherl, secretary; additional directors, Casper H. Rowe, James A. Green, Samuel E. Hilles, and George McG. Morris.

Marion Insulated Wire and Rubber Co. (Marion, Indiana).—Directors: J. L. Barley, Robert J. Spencer, L. C. Lillard, John Prior, M. Gartland, C. E. Van Vactor and R. E. Lucas. Mr. Gartland succeeds Joseph Hulley, a member of the board from the beginning, retired on account of ill health. Officers: J. L. Barley, president; Robert J. Spencer, vice-president; Hiram Beshore, treasurer; R. E. Lucas, secretary and general manager.

### FAILURE IN THE WINDOW STRIP TRADE.

A PETITION in bankruptcy has been filed against Roebuck's Weather Strip and Wire Screen Co., of New York and Brooklyn, by an attorney for creditors with claims for \$71,769. It is alleged that the company is insolvent and committed an act of bankruptcy on March 2 by making a preferential payment of \$1,200 to a certain rubber company. Lindsay Russell has been appointed receiver. In December last the company reported assets of

\$252,744 and liabilities of \$104,811. The business was established in 1858 by Samuel Roebuck, who died on February 9 in his eighty-first year, after having retired from business.

### NEW INCORPORATIONS.

L. J. MUTTY Co., February 4, 1909, under the laws of Massachusetts; capital authorized, \$120,000. Directors: Louis J. Mutty, president and treasurer; Robert R. Gurney, clerk; John B. Mutty. They succeed to the business of L. J. Mutty Co., who for some years have been supplying mackintosh cloths for automobile tops and such like goods at No. 276 Devonshire street, Boston.

Liberty Rubberized Specialty Co., January 8, 1909, under the laws of New York; capital, \$5,000. Incorporators: Henry Feldman (No. 2170 Fulton street), Louis Smith, and David Cohen, all of Brooklyn, New York.

Dick Rubber Manufacturing Co., February 10, 1909, under the laws of New York; capital, \$1,000. Gustave Weinburg (No. 17 East Ninety-seventh street), and Maurice M. Faber, New York city; Richard Shippen, Hoboken, New Jersey.

Dependable Auto Tire Co., February 3, 1909, under the laws of Delaware; capital authorized, \$1,000,000. Incorporators: R. R. Hansell, George H. B. Martin, and S. C. Seymour, all of Philadelphia.

Indianapolis Rubber Co. (Indianapolis, Indiana), a corporation under the laws of Indiana, on February 19, 1909, qualified to transact business in Illinois, under the foreign corporations act of the latter State. Object, the manufacture and repair of rubber goods.

Buffalo Rubber Tire Co., February 11, 1909, under the laws of New York; capital, \$5,000. Incorporators: George M. Steele, Thomas C. Ringgold, and George C. Criuel, all of Buffalo, New York.

Universal Rim Co., February 25, 1909, under the laws of Illinois; capital, \$100,000. Incorporators: Charles Gilbert Hawley, Ross E. Aiken and Erle K. Baker. Principal office, 800 Railway Exchange building, Chicago.

The A. E. Alling Rubber Co., March 3, 1909, under the laws of Connecticut; capital \$15,000. Incorporators: Arthur E. Alling, F. W. Alling and Clarence E. Alling. The new corporation takes over the business of The Alling Rubber Co., of New Haven, incorporated May 9, 1901, to acquire the wholesale and retail rubber goods store at No. 13 Church street in that city. Arthur E. Alling, president and treasurer of the new corporation, has been interested in the Alling rubber syndicate from the beginning, and connected with the New Haven store since it was acquired by the Alling interest. He will continue in charge of the store.

Royal Rubber Co., March 8, 1909, under the laws of Ohio; capital \$50,000. Incorporators: A. M. Cole, Samuel J. Cole, George N. Eby, Edmund H. Cole, Oscar Dickerhoof and H. N. Eby. The company will succeed the Eagle Rubber Co., recently incorporated for the manufacture of druggists' sundries and molded goods at Barberton, Ohio. The new company intend to enlarge the manufacturing facilities and locate in Akron. George N. Eby has been the principal owner of the business.

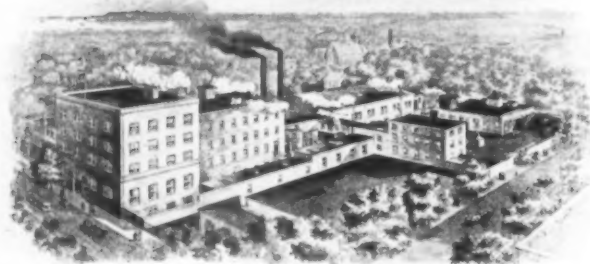
Continental Caoutchouc Co., a corporation of New York, on March 9, 1909, qualified to transact business in Illinois under the foreign corporations act of that State. The incorporators named are E. S. Williams, W. H. Gleason, and C. C. Case. The capital in Illinois is \$50,000.

Dow Rim Co., March 15, 1909, under the laws of New York; capital \$100,000. Incorporators: Francis J. Erwin (No. 219 West Twelfth street), and William H. Heagerty, New York city; Emma W. Renné, Hoboken, New Jersey.

## NEW FACTORY OF THE TRAUN RUBBER CO.

THE name Traun has long been known in connection with the manufacture of india-rubber, dating back very many years at Harburg a/Elbe. Some years ago the parent company established an agency in the United States for certain of their goods manufactured in Germany, and in addition started a small factory in Brooklyn, which was then called the Excelsior Rubber Co. Later they purchased a plant in College Point, Long Island, which they equipped with rubber machinery, and notably enlarged their line of products. To-day this factory, operated under the style Traun Rubber Co., under the management of Mr. Felix Schwemer, vice-president and superintendent, is a model in its line. The goods manufactured are largely specialties, such as dental and stamp rubber, together with a fine line of druggists' sundries. As would be expected much has been done in hard rubber, particularly parts that are applicable to the druggists' sundries line.

The factory buildings are of brick, of mill construction, and equipped throughout with modern labor saving devices. The power plant consists of two boilers of 250 H.P., a 200 H.P. high speed Hewes & Phillips engine, and an electric lighting plant. The rubber machinery embraces a washer and mixer, 4 grinders, 1 calender, several tubing machines, and a number of large double ended vulcanizers. The factory has a fully equipped machine



PLANT OF THE TRAUN RUBBER CO. (COLLEGE POINT.)

shop, a department where it makes all of its own molds, and a blacksmith's shop for heavy work. The business employs about 200 hands. The present plant is so laid out that there is plenty of room for expansion, and indeed plans are already in hand for more buildings and additional machinery.

The product of the factory is marketed through the New York office and salesroom, under the direct charge of Mr. William Schrader, treasurer of the Traun Rubber Co., and Mr. William Ehlers, secretary.

## TRADE NEWS NOTES.

THE Merchants' Association of New York has elected for the ensuing year: Henry R. Towne, president; Gustav H. Schwab, William A. Marble, and Robert C. Ogden, first, second and third vice presidents; Gustav Vintschger, treasurer; Samuel C. Mead, secretary, and Hon. John W. Griggs, counsel.

At the dedication of the new factory of Wilkie Rubber Manufacturing Co., whose removal from Lynn to Saugus, Massachusetts, was reported lately, the employes' association called the Ebonite had charge of the program, which was interesting and carried out with great success.

A recent fire at Dallas, Texas, was reported to have caused damage to the amount of \$15,000 to the stock of Appel & Burwell Rubber and Tire Co.

The plant of Imperial Rubber Co. (Canton, Ohio) was damaged by a recent windstorm which removed a large part of the roof.

## TRADE NEWS NOTES.

THE directors of Boston Woven Hose and Rubber Co. declared a semi-annual dividend of \$4 per share on the common stock of the company, payable on March 15.

Siemon Hard Rubber Corporation (Bridgeport, Conn.) have appointed as their Western representative George T. Westcott, No. 152 East Lake street, Chicago, for the sale of their telephone and other goods made of hard rubber substitute.

Hope Webbing Co. (Providence, Rhode Island) have arranged for the sale of their electrical tapes and kindred goods in Western territory through the Belden Manufacturing Co., of Chicago.

General Electric Co. have removed their New England branch office from No. 84 State street, Boston, to their works at West Lynn, Massachusetts.

The copartnership existing between Max M. Berzen and Nat E. Berzen, under the firm name of M. Berzen & Co., dealers in scrap rubber and manila rope, at No. 226 Front street, New York, has been dissolved as from March 1. The business will be continued at the same address by Nat E. Berzen.

The fortieth regular quarterly preferred dividend of 1¾ per cent. of the Rubber Goods Manufacturing Co. was payable on March 15, checks being mailed to register addresses.

Mr. Frank H. Van Derbeck, for some years in charge of the railroad rubber department of United and Globe Rubber Manufacturing Cos., at Trenton, New Jersey, has resigned to accept a similar department for the Hewitt Rubber Co., at Buffalo, New York.

Mr. Frank R. Henderson, after an experience of ten years in the crude rubber market, and latterly a member of the firm of Robinson & Co. (New York), in this trade, will be established in business as a rubber broker on his own account, at No. 82 Beaver street, New York, from March 1.

Connecticut Rubber Co. (Hartford, Conn.), incorporated November, 1901, and engaged before and since in the retail rubber goods trade, have applied for the appointment of a receiver. The company is reported solvent, but the owners desire to go out of business.

Hugh Bullock, late assistant superintendent of the Beacon Falls Rubber Shoe Co., has removed to Malden, Massachusetts, where he will be factory manager of the new Converse Rubber Shoe Co.

The H. F. Taintor Manufacturing Co. give notice of the removal of their offices from No. 200 Water street, New York, to No. 2 Rector street (in the United States Express building).

Henry L. Shippy, connected with the business of John A. Roebling's Sons Co. since 1875, and latterly treasurer of their New York branch, has resigned on account of his desiring to retire from business, and is succeeded by W. P. Bowman, hitherto manager of the Roebling's Cleveland branch.

Mr. R. J. Owens assumes his new duties as manager of the New York branch of the Boston Woven Hose and Rubber Co. on April 1, filling the vacancy made by the resignation of Mr. W. F. Foster. Assistant Sales Manager H. S. Marsh will succeed Mr. Owens as manager of the Boston branch.

Referring to newspaper reports that the United States Rubber Co. were considering the lowering of their prices, the company have authorized a denial, pointing out the considerable advance in crude rubber that has taken place since the present prices for their goods were fixed.

The directors of the United Shoe Machinery Co., at a recent meeting, in addition to the regular quarterly dividend of 1½ per cent. on the preferred and 2 per cent. on the common stock, declared a stock dividend of 10 per cent. on the common stock and an extra 2 per cent. besides. The annual report for the year ending March 31, 1909, is expected to show as large net earnings as for the preceding year, as operating expenses should show a substantial decrease through curtailed factory operations.

## NEW INCORPORATIONS.

ELECTRICAL Insulating and Specialty Co., February 24, 1909, under the laws of Ohio; capital, \$50,000. Incorporators: Samuel S. Jeffries, Dr. H. E. McClery, Joseph McCann, Oren Jeffries, and O. C. Ingalls. The company will manufacture at Cleveland, Ohio, a substitute for rubber, for insulating and other purposes. Charles C. Clark has been elected president.

Reliable Rubber Co., February 1, 1909, under the laws of New York; capital \$15,000. To manufacture rubber clothing, sundries and specialties. Samuel L. Riley, president; Louis Brown, vice-president; John A. Riley, secretary, Horace E. Patrick, treasurer; Henry G. Gerhard, superintendent. Main office: Tuckahoe, N. Y.; factory, Bronxville, N. Y.

Philadelphia Rubber Paint Co., February 11, 1909, under the laws of Delaware: capital authorized \$100,000. Incorporators: Charles W. Lamon, Boylston J. Gossler and W. I. N. Lofland.

Jamison-Semple Co., March 3, 1909, under the laws of New York; capital \$30,000. To make surgical rubber goods. Incorporators: James Gough Jamison (No. 309 West Ninety-third street), Thomas D. Semple and Bernard A. Jamison, all of New York City.

## AN ASBESTOS MONOPOLY.

REPORTS from Canada are that an important merger of asbestos interests has taken place, under the style Amalgamated Asbestos Corporation, Limited, with a capital of \$17,500,000, of which \$7,500,000 in first mortgage bonds, \$1,875,000 in cumulative 7 per cent. preferred shares, and \$8,125,000 in common shares. It is estimated that the new corporation will control 70 per cent. of the world's present production of asbestos.

## REMOVAL OF THE ARCHER RUBBER CO.

THE Archer Rubber Co. (Milford, Massachusetts), have removed to the factory building formerly occupied by the Milford Rubber Co., in the same town. The sale of the premises to Frank P. Lee was reported in these columns last month. Mr. Lee is treasurer of the Archer Rubber Co., incorporated something over two years ago to engage in the waterproofing trade; the president is Calvert B. Archer, formerly superintendent of the Milford Rubber Co.

## INCREASE OF CAPITAL.

THE Seamless Rubber Co. (New Haven) have filed with the secretary of state of Connecticut a certificate of increase of their capital stock from \$300,000 to \$400,000. It is understood that an important programme of business extension is being developed by the company. It is just seventeen years since THE INDIA RUBBER WORLD reported an increase in the capital of the Seamless company from \$50,000 to \$100,000, and such increases have continued to be made until the total now reaches the large figure mentioned above.

## HEANY INSULATED WIRE INTERESTS.

A NEW company called The Heany Co. has been organized under the laws of New Jersey, to take over the business of The Heany Fireproof Wire Co. and of the Teter-Heany Development Co., both with plants at York, Pennsylvania. The capital stock is \$3,500,000, and the main office is at No. 25 Broad street, New York. The tungsten lamp business will be in charge of a subsidiary corporation, the Heany Lamp Co. The interests involved are the same as those that control the Habirshaw Wire Co. (New York), several members of the Habirshaw board holding seats in that of The Heany Co.

## "THERMOID" BRAKE LINING FOR MOTOR CARS.

AN unusually attractive publication entitled "The Automobile of 1909" is an album of views of more than a score of leading makes of automobiles, interspersed with fine photogravures of motoring scenes in different parts of the country. In connection with each make of motor car mentioned its specifications are given, and in each case the brakes are mentioned as being lined with "Thermoid," which is manufactured by the Trenton Rubber Manufacturing Co. (Trenton, New Jersey).

## TRADE NEWS NOTES.

THE regular quarterly dividend of \$2 per share on the stock of the Boston Belting Co. is payable on April 1.

The quarterly dividend of 2½ per cent. of Westinghouse Air Brake Co. is payable April 10.

The directors of the Corn Products Refining Co. (New York) on March 16 declared a quarterly dividend of 2 per cent. on the preferred stock, making 5 per cent. for the year, the last three previous dividends having been 1 per cent. quarterly.

The directors of the Canadian General Electric Co., Limited, have declared a quarterly dividend of 1¼ per cent. on the common shares, payable on April 1.

The Boston-Panama Timber and Rubber Co., the incorporation of which was reported in the last INDIA RUBBER WORLD, has been planned to engage in the hard wood export from the "Rio Congo" timber tract in the Republic of Panama, and incidentally to develop any other interests for which this region may be suited, including the collection of wild rubber. Charles G. Brazier, of Collins & Fairbanks Co., No. 381 Washington street, Boston, is among those interested.

The Commercial Cable Co. will lay a submarine cable between New York and Newfoundland, 1,700 miles in length, at a cost of \$1,500,000 or more. The cable will be built up by the Telegraph Construction and Maintenance Co., Limited (London), and under the contract is to be in operation not later than August 1.

Mr. B. T. Morrison, having retired from active business, after having been identified with the rubber trade for twenty-three years, latterly as treasurer and general manager of the Reading Rubber Manufacturing Co. (Reading, Massachusetts), Mr. William H. Marland has been elected treasurer of this company.

J. & H. Phillips, dealers in rubber goods and linoleums at No. 136 Sixth street, Pittsburgh, since 1855, have leased for ten years a new building on Liberty avenue, which they will occupy in future. Five members of the firm are heirs of an estate to which the Sixth street building belongs, and the building has been vacated by the firm to facilitate a division among the heirs.

The Massachusetts Chemical Co. are making further additions to their plant at Walpole, Mass. The present addition is to accommodate the increase in the business of the molded rubber department. Bushings, pump valves, rubber mats and car steps are also some of the specialties of the rubber department of the Massachusetts Chemical Co.

The Buffalo (New York) office of the New York Belting and Packing Co., Limited, has been removed to No. 260 Carolina street.

The Merchants' Association of New York has taken action protesting against a proposition now being considered by the ways and means committee of the house of representatives at Washington, having in view a change in the basis of assessing dutiable values from the present basis of current market values in the country of export to the selling price in the United States.

The Monroe Rubber and Metal Co. (Rochester, New York), have certified to the secretary of state an increase of capital stock from \$3,500 to \$7,000. Abraham E. Hork is president and Joseph Marine secretary.

The Empire Automobile Tire Co. (Trenton, New Jersey) are erecting a large addition to their plant—a duplication of the building put up a year ago.

Mr. Alexander O. Holroyd, who came to the United States with the first introduction here of the Dunlop tire, and latterly at the Hartford Rubber Works Co., as manager of their Dunlop tire department, has gone to Daytona, Florida, as manager of the Prince George Hotel there.

The Fisk Rubber Co. (Chicopee Falls, Massachusetts), are referred to as having closed a contract for equipping with their removable rims and bolted-on tires all the machines which may be turned out this year by the Webb Motor Fire Apparatus Co., of Vincennes, Indiana, the initial order calling for 50 sets of 60 x 40 tires.



## RUBBER GOODS MANUFACTURING CO.—ANNUAL.

THE annual meeting of shareholders of the Rubber Goods Manufacturing Co. (New York), for the election of directors and the transaction of any other business which may properly be brought before the meeting, will be held at the principal office of the company, No. 15 Exchange place, Jersey City, New Jersey, on Thursday, April 8, at 12 o'clock noon. Under the New Jersey corporation law no share of stock may be voted at this meeting which shall have been transferred after March 19.

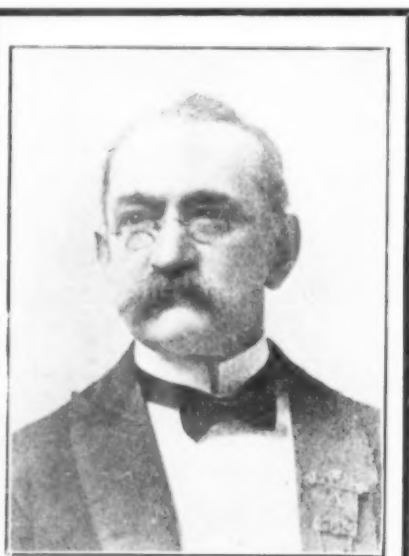
## OBITUARY—WILLIAM H. WHALEN.

WILLIAM H. WHALEN died at his home, No. 325 Central Park West, in New York, on March 2. The trouble was uræmia, of which he had been ill for nearly a year. Mr. Whalen was born in Boston on February 5, 1851, and at an early age his tastes led him to find employment in a railroad office—that of the Old Colony road.

On reaching his twenty-first year Mr. Whalen went to Chicago to accept a position with what is now the Chicago, Rock Island & Pacific Railway Co., of which he became assistant purchasing agent. In 1899 he returned to the East, this time as purchasing agent for the Delaware, Lackawanna & Western railroad. At this time he made his home in the Oranges, in New Jersey.

In 1903 Mr.

Whalen became general purchasing agent for the Rubber Goods Manufacturing Co. (New York), which position he held at the time of his death. Mr. Whalen had under his charge a large volume of business detail, including at one time the buying of crude rubber for the factories operated by the Rubber Goods company in connection with which it was at times necessary to go abroad. Apart from his business connections, he was prominent in Masonic circles, being past high priest of Normal Chapter, Royal Arch Masons, of Chicago, and holding various other positions. He is survived by a widow and one daughter. Funeral services were held at his late home, and the interment was at East Orange, New Jersey.



THE LATE WILLIAM HENRY WHALEN.  
[Purchasing Agent of the Rubber Goods Manufacturing Co.]

GEORGE C. HOUGHTON, for some years past secretary-treasurer of the National Shoe Wholesalers' Association of the United States, and secretary of the Boston Boot and Shoe Club, with offices at No. 166 Essex street, Boston, died on March 5 at his home in Lynn, Massachusetts, in his sixty-fourth year.

ROBERT A. PERKINS, whose death was reported recently, was personal attendant to the late Hon. E. S. Converse after that gentleman had become blind, after which he was in the employ of the Boston Rubber Shoe Co. and still later that of the Utica Rubber Co., of Utica, New York.

## TRADE NEWS NOTES.

THE old Pope Manufacturing Co.—the New Jersey corporation—have been formally dissolved by a decree signed by Vice Chancellor Howell, of New Jersey. In the petition for the decree it was stated that all claims against the company had been paid. The Pope Manufacturing Co. organized under the laws of Connecticut have taken over from the receivers all the property of the old company, and is now the only Pope Manufacturing Co. doing business.

The treasury department at Washington has issued an order allowing a drawback upon exports of hose supporters manufactured by I. B. Kleinert Rubber Co. (New York), with the use of imported elastic webbing, equal to the duty paid on the imported material, less 1 per cent.

The only feature of the mechanical goods situation is the continued heavy demand for rubber tires, which is estimated by some authorities to take up fully 20 per cent. of the country's consumption of crude rubber.

The factory of the Boston Woven Hose and Rubber Co. at Plymouth, Massachusetts, is being provided with better protection against fire, through the installation of a large water main from the mill pond, connected with hydrants about the premises.

An action has been brought against Sears, Roebuck & Co. (Chicago) by the Beacon Falls Rubber Shoe Co., seeking a perpetual injunction restraining the Chicago firm from using the name of the latter in their catalogues or other publications. Sears, Roebuck & Co. are a mail order house, and the rubber company state that they do not sell in that trade.

Mr. Gove S. Taylor has been appointed general sales agent of the Combination Rubber Manufacturing Co. (Bloomfield, New Jersey), and the marketing of this company's goods will in future be through their New York office, No. 13 Park row. Mr. Taylor was formerly manager of the Peerless Rubber Manufacturing Co.

Rubbertex Cloth and Paper Co., a corporation formed under the laws of Indiana in 1905, have qualified to transact business in Illinois, and the principal offices have been removed from Logansport, Indiana, to Chicago.

Gladiator Packing and Rubber Co., No. 118 East Third street, Los Angeles, California, carry a special line—"Gladiator" brands—of mechanicals and molded goods, together with asbestos and other engine room supplies. Sydney L. Plant is president; C. R. Chase, vice-president and manager; A. G. Wright, secretary; and Citizens' National Bank, treasurer.

William Seward, Jr., some time secretary of the Hartford Rubber works Co. and later with the Seward Rubber Co., has become connected with the sales department of the Michelin Tire Co.

The Bergdoll Co., operating 30 taxicabs in Philadelphia, have closed a contract for the equipment of their cabs hereafter with tires made by The Fisk Rubber Co.

Pope Manufacturing Co. (Hartford, Connecticut), issue for the 1909 trade a handsome catalogue of their "Columbia" and "Hartford" bicycles. These wheels are equipped with the same tires that were formerly made by the Pope company themselves, when they owned the Hartford Rubber Works. Their standard equipment is "Hartford" tires with "G & J" clincher as an option and Dunlop tires for export trade.

## TO PLANT RUBBER IN THE UNITED STATES (1).

THERE was registered in England, on February 22, a company styled Myakka, Limited, with an authorized capital of £240,000, to acquire lands in the state of Florida, on the Gulf of Mexico side, in the neighborhood of Tampa bay, and to carry on the business of planters and manufacturers of and dealers in cotton, oils, and fiber, india-rubber, gutta-percha, and other gums. The registered office is at 70 Queen Victoria street, E. C., London.

## CONSUMERS' RUBBER CO.

THE Consumers' Rubber Co. (Bristol, Rhode Island), have materially increased their output of rubber-covered wire since January 1, a recent individual shipment aggregating 1,000,000 feet. The company have started the manufacture of a general line of rubber footwear, including tennis shoes, good orders for which are already booked for immediate shipment. They will make a specialty of catering for foreign business on tennis shoes, and claim to be on a competitive basis with any manufacturer of this class of goods.

## TRADE NEWS NOTES.

THE original and only refiner of fossil flour, Colonel D. S. Collins, is back in the field and plans soon to visit the rubber trade. His company, the Oxford Tripoli Co., have long been known to both American and European manufacturers.

The Hartford Rubber Works Co. have contracted to supply tires for 25 new De Dion-Bouton omnibuses for the Fifth avenue service of the New York Transportation Co., which company have been using Hartford tires for 10 years.

The Western Rubber and Supply Co. have been incorporated at Kansas City, Missouri, and will handle the products of The Firestone Tire and Rubber Co. (Akron, Ohio), at No. 1737 Grand avenue. The company includes W. E. Fouse and William F. O'Neill, both lately of Akron.

The progress of motoring in Mexico is indicated by the introduction of tire repairing shops in that country. One such establishment is that of Cia. Vulcanizadora Mexicana, S. A., of Mexico City.

Mr. G. Edward Habich, of Boston, well known as a marketer of crude rubber in New England, has just returned from Europe, where he has been visiting important crude rubber houses.

Mesta Machine Co. (Pittsburgh, Pennsylvania) are now manufacturing rubber machinery, and have retained Mr. M. P. Fillingham as consulting engineer.

Mr. Edward E. Huber, of the firm of Eberhard Faber (New York) and secretary of the Rubber Sundries Manufacturers' Association, accompanied by Mrs. Huber, is sailing on April 1 by the steamer *Carpathia* for Naples, for a vacation of two months or more.

The great growth of the automobile industry has caused the public for the most part to overlook the bicycling interest, but the fact that bicycles yet fill an important place in the trade is evident from the success of the Kokomo Rubber Co. (Kokomo, Indiana), founded in the year 1895, and devoted constantly since to the manufacture of tires, though they have never yet taken on automobile tires. Their output lately, however, has included a considerable production of motorcycle tires, which are made in clincher form. Their bicycle tires are of the single tube type.

In the sketch of Mr. R. M. Howison, of the London rubber trade, which appeared in the last number of this journal, his firm was referred to as representing, among other American concerns, the Pennsylvania Rubber Co. It is proper to state that the article referred to was written some time before its appearance, and that when it was printed Messrs. Howison & Co., Limited, had already ceased to represent the Pennsylvania company.

## COLT-BARRYMORE.

MR. RUSSELL GRISWOLD COLT and Miss Ethel Barrymore were married in Hyde Park, near Boston, on March 15. The bride is the daughter of the late Maurice Barrymore and Georgia Drew Barrymore, and a niece of John Drew—three of the most notable members of the dramatic profession in America—and is herself a popular favorite on the stage. Mr. Colt is the elder son of Colonel Samuel P. Colt, president of the United States Rubber Co., and at one time held a position in the general offices of that company. He was one of Commodore Benedict's party to ascend the Amazon in the tour described in Mr. Arthur's book, "Ten Thousand Miles in a Yacht." Mr. Colt will enter the Stock Exchange firm of H. L. Horton & Co., of New York.

## PERSONAL MENTION.

THE Hon. William M. Ivins, formerly president of the General Rubber Co., and long familiar with conditions of the rubber trade and of the principal rubber producing countries, is the head of the commission appointed some time ago to revise the charter of the City of New York. The report of the commission is now being considered by the legislature of the state, at Albany.

The wedding of Mr. Thomas W. Miller, president of The Faultless Rubber Co., and Miss Helen A. Meyers, the daughter of a prominent manufacturer in Ashland, Ohio, was announced to take place at the home of the bride at noon on March 31.

On March 10, at West Paris, Vermont, was celebrated the sixtieth anniversary of the wedding of Mr. and Mrs. Samuel W. Dunham, there being present 28 of their descendants, including their three sons—Charles W., George L., and Lyndon L.—who are members of the wholesale shoe house of Dunham Brothers Co., of Brattleboro, Vermont, one of the leading concerns of its kind in the United States. The Dunham firm are distributors in the East of the "Ball brand" rubbers, made at Mishawaka.

Mr. A. M. Paul, president of the Davidson Rubber Co. (Boston), who has been suffering from a severe cold, is on his way south for a few weeks' recuperation.

Mr. John H. Flint, treasurer of the Tyer Rubber Co. (Andover, Massachusetts), has returned from a month in Florida.

Mr. Francis H. Appleton, of F. H. Appleton & Sons (Boston), will spend the month of April in Bermuda.

Mr. George M. Allerton, general manager of the Seamless Rubber Co. (New Haven, Connecticut), has been seriously ill, but at last reports was on the mend.

## WASTE RUBBER SITUATION.

THE waste rubber market in the United States recently has been marked by the unusual condition of foreign shoes being quoted at prices as high or higher than domestic, which is ascribed to the fact that certain reclaimers accustomed to using imported stock for some of their products do not desire to make a change, and in view of lessened supplies abroad have been paying an advance on imports over the price of domestic waste rubber. The rubber shoes imported in the past have come mainly from Russia, where a standard has been established in quality and packing. Such other rubber shoes as are imported may be bought for a little less. Old rubber shoes are entered largely from other than Russian ports, but the origin is mainly in Russia.

Some two years ago an export duty equal to 2½ cents a pound on waste rubber from Russia went into effect, since which time the trade in such goods has declined very measurably. The two principal rubber factories in Russia have established reclaiming plants, first for their own needs, and latterly have become exporters of reclaimed rubber to an important extent to other European countries. In this they have a distinct advantage, not only in drawing for supplies upon a market near at hand, but in being able to purchase waste rubber more cheaply than the outside world can now obtain Russian stock. It is reported that the Russian companies referred to have approached some important consumers in the United States with a view to establishing trade here. Up to date reclaimed rubber has not been imported in America; on the other hand, large quantities made here have gone abroad. The tariff law of the United States does not specify reclaimed rubber, but imports of such material presumably would be dutiable under the general provision imposing 20 per cent. *ad valorem* on "all articles manufactured in whole or in part" not provided for in the schedule.

BAGPIPES as now made call for a considerable amount of india-rubber, for the bags, which are made "straight" or "shaped," in a variety of forms. Bagpipes are listed by one leading British rubber manufacturer as high as 99 shillings [=about \$24].

## THE RUBBER INTEREST IN EUROPE.

DR. ING. ADOLF PRINZHORN.

THE senate of the Technische Hochschule (technical high school) of Charlottenburg (Berlin) have conferred a notable distinction upon Herr Adolf Prinzhorn, until recently managing director of Continental Caoutchouc- und Guttapercha-Compagnie, the honorary degree of doctor of engineering. This is in recognition of the eminent services rendered by him in behalf of the development of the rubber industry in Germany. This is referred to as the first time that a representative of this trade has been thus favored, and the honor is appreciated by the whole rubber interest.

## BETTER DUNLOP BUSINESS IN GERMANY.

THE Dunlop Pneumatic Tyre Co., Aktiengesellschaft, at Hanau, closed their second business year with gross trading profits of 870,460 marks [= \$207,169.50], against 829,846 marks last year. General costs amounted to 600,255 marks, and after writing off for depreciation and bad debts, a net profit remained of 223,018 marks, against 105,526 marks last year. A dividend of 4 per cent. was declared—calling for \$49,900—against nothing last year, and the carry over is 75,650 marks.

## AFFAIRS OF VOIGT &amp; WINDE (BERLIN).

THE directors of Gummiwaren-Fabrik Voigt & Winde, Aktiengesellschaft, of Berlin, have advised that the company go into liquidation. The company was formed in 1873. The capital for some time past has been 1,000,000 marks [= \$238,210], and until recently good dividends have been paid. The last dividend declared was 3 per cent., and there was none last year. They manufacture mechanical goods.

## INCREASE OF CAPITAL AT ST. MARY'S MILLS.

W. & A. BATES, LIMITED, rubber manufacturers at St. Mary's Mills, Leicester, issued recently at par £45,000 in 6 per cent. cumulative preference shares, increasing their total outstanding capital to £109,007. The business was formed in 1863, and organized into a company in 1890. The business was founded by Mr. William Henry Bates, associated with whom was Mr. Hugh Faulkner, and both are now members of the board. They manufacture a wide variety of rubber goods, but their tire trade particularly has been growing of late. The average annual profit for three years past is stated at £19,337 11s. 7d., and for the year ended August 31 last, £23,648 13s. 4d.

## PROFITS OF BRITISH COMPANIES.

TELEGRAPH Construction and Maintenance Co., Limited, report a net profit for 1908 of £61,896 [= \$301,216.88], after charging interest on debentures. The company's general business was satisfactory, and the plant is maintained in good condition. Dividends for the year total 15 per cent.; for the three preceding years, 15, 15, and 17½ per cent.

W. T. Henley's Telegraph Works Co., Limited, report a net profit for 1908 of £71,274 [= \$346,854.92], the increase in gross profits being nearly £6,000. Dividends were as usual—15 per cent. on the ordinary and 4½ per cent. on the preferred shares.

Liverpool Electric Cable Co., Limited.—At the Seventh annual meeting (Liverpool, December 22) the dividends declared for the year aggregated 7½ per cent., with a bonus of 2½ per cent., making a total of 10 per cent.

## GREAT BRITAIN.

THE trustees under the will of the late James Dick, one of the founders of R. & J. Dick, Limited (Glasgow), have allocated the sum of £311,500 [= \$1,515,914.75] out of the residue of the estate to Scottish charities, 160 of which have shared in the bequests.

The Peerless Rubber Manufacturing Co. (New York) are now represented in Great Britain by Carr Brothers, Limited, 11 Queen Victoria street, E. C., London, who are stocking "Rain-bow" packings and other specialties of the Peerless company.

Sinclair Rubber Co., Limited, registered in Edinburgh, Novem-

ber 20, 1908; capital, £5,000 [= \$24,332.50]. The object is to acquire the business of the Sinclair Rubber Co., Edinburgh, and certain allied businesses carried on by J. C. Sinclair, P. F. Gemmell, and D. S. K. Greig, who form the directorate of the new company.

At the thirteenth annual meeting of the Self Sealing Rubber Co. (Birmingham, November 24), the accounts showed a net profit for the year of £1,993 [= \$9,699]. A dividend of 10 per cent. was declared.

The patent rights for Great Britain for the Bailey "Won't Slip" tire have been acquired by the North British Rubber Co., Limited, (Edinburgh).

Mr. Blaisdell, the inventor of the paper-wound lead pencil, is mentioned in our London contemporary as having "invented a core for solid rubber tires, whereby considerable resiliency is attained." It is not mentioned what material is used to afford more resiliency than is inherent in rubber.

Rom Tire and Rubber Co., Limited, registered in London December 11, 1908; capital £5,000 [= \$24,332.50]. Offices, 32 Rosebury avenue, E. C., London.

## GERMANY.

THE rubber goods and hemp hose factory of B. Polack, at Waltershausen, earned a net profit of 463,574 marks during the last business year. The dividend was 20 per cent.

The firm Sächsische Packungs-Industrie, Hermann Kramer, at Radeberg, has been wound up.

Carl Poppe, on February 4, celebrated the twenty-fifth anniversary of his connection with Vereinigte Berliner-Frankfurter Gummiwaren-Fabriken. For many years he represented the company effectively in London, after which he was appointed manager at the branch factory at Gelnhausen, since which time he has been joint managing director of his company.

There has been organized at Hanover, Germany, the Continental Caoutchouc Uebersee Compagnie Aktiengesellschaft for the sale generally of the products of the Continental Caoutchouc- und Gutta-Percha-Compagnie of Hanover and Continental Société Anonyme de Caoutchouc Manufacture in Paris. The capital named is 100 marks. The founders named are Messrs. Siegmund Seligmann, Dr. Albert Gerlach and Willy Tischbein—all of the Hanover management.

## SWITZERLAND.

THE establishment is announced of a new cable and rubber goods factory at Zürich, under the style Schweizerische Draht- und Gummiwerke A.-G. The capital is 600,000 francs, and Heinrich Neudörffer is managing director.

## RUSSIA.

MR. G. HEYSE, manufacturing director of the Russian-American India-Rubber Co., "Treügolnik," has resigned that position, on account of ill health.

## LONDON'S COMING TRAVEL EXHIBITION.

A MOST attractive program is that arranged for The World's Touring, Sports, Pastimes, Travel, and Topical Exhibition, for the Olympia, London, July and August next, under the organization of Mr. A. Staines Manders, J. P., whose successful management of the International Rubber and Allied Trades Exhibition, in the same building last September, was so widely recognized. The field of travel and sports is so wide as to embrace a very large proportion of people of culture in every land, and the fact that this novel exhibition will attract widespread attention is attested by the character of the names of the preliminary list of vice-presidents and the advisory committee. Sir Gilbert Parker, D. C. L., M. P., is president, and the list includes not a few who were identified with the Rubber Exhibition, particularly Colonel W. J. Bosworth, who again is to be chairman of the executive committee.



## Review of the Crude Rubber Market.

**D**ULLNESS in all the markets for rubber has been the predominant characteristic since our last report, and the latter part of the month showed a general decline in prices, the rate being more marked in connection with Pará than with medium grades. The condition is attributable to inactivity in the consuming markets. General business in the United States has not yet attained normal conditions following the depression which began in 1907, and while there are many indications of improvement, the fact that the tariff schedules are being revised at Washington may be expected to cause—as tariff discussions always do—a slackening of business and industrial activity until a definite result is reached. One branch of the rubber industry, however, seems as active as ever, if not more so—namely, the manufacture of tires.

At the rubber inscription at Antwerp on March 25, when about 290 tons were offered, the prices realized were equal at least to the brokers' estimations, and according to some reports averaged a little higher.

Following are quotations at New York for Pará grades, one year ago, one month ago, and March 29—the current date:

PARÁ.	Apr. 1, '08.	Mar. 1, '08.	Mar. 29.
Islands, fine, new.....	76@77	119@120	119@120
Islands, fine, old.....	none here	121@122	121@122
Upriver, fine, new.....	77@78	125@126	122@123
Upriver, fine, old.....	80@81	127@128	125@126
Islands, coarse, new.....	41@42	61@ 62	57@ 58
Islands, coarse, old.....	none here	none here	none here
Upriver, coarse, new.....	55@56	96@ 97	94@ 95
Upriver, coarse, old.....	none here	none here	none here
Cametá.....	66@ 67	63½@ 64	
Caucho (Peruvian), ball.....	45@46	85@ 86	83@ 84
Caucho (Peruvian), sheet.....	55@56	74@ 75	73@ 74
Ceylon (Plantation), fine sheet.....	83@84	129@130	129@130

### AFRICAN.

Lopori strip, prime.....	108@109	Massai, red.....	95@96
Lopori strip, prime, none here.....		Soudan niggers.....	85@86
Aruwimi.....	94@ 95	Cameroon ball.....	64@65
Upper Congo ball, red.....	96@100	Benguela.....	59@60
Ikelemba.....	none here	Madagascar, pinky.....	89@90
Sierra Leone, 1st quality.....	95@ 96	Accra flake.....	20@21

### CENTRALS.

Esmeralda, sausage.....	80@81	Mexican scrap.....	@—
Guayaquil, strip.....	70@71	Mexican slab.....	57@58
Nicaragua, scrap.....	78@80	Mangabeira, sheet.....	52@53
Panama.....	62@63	Guayule.....	30@31

### EAST INDIAN.

Assam.....	92@93	Borneo.....	35@45
Pontianak.....	5		

Late Pará cables quote:

	Per Kilo.		Per Kilo.
Islands, fine.....	\$8750	Upriver, fine.....	\$68750
Islands, coarse.....	\$8500	Upriver, coarse.....	\$48750
		Exchange.....	15¼d.

Latest Manás advices:

Upriver, fine.....	\$6875	Exchange.....	15¼d.
Upriver, coarse.....	\$4875		

### African Rubbers.

#### NEW YORK STOCKS (IN TONS).

January 1, 1908.....	156	September 1, 1908.....	133
February 1.....	224	October 1.....	134
March 1.....	123	November 1.....	134
April 1.....	201	December 1.....	179
May 1.....	165	January 1, 1909.....	156
June 1.....	446	February 1.....	157
July 1.....	334	March 1.....	200
August 1.....	145		

### Statistics of Para Rubber (Excluding Caucho).

	NEW YORK.		Total	Total	Total
	Fine and Medium.	Coarse.	1909.	1908.	1907.
Stocks, January 31.....	180	55 =	235	110	128
Arrivals, February.....	1273	481 =	1754	1397	2205
Aggregating.....	1453	536 =	1989	1507	2333
Deliveries, February.....	1144	460 =	1604	1355	2137
Stocks, February 28.....	309	76 =	385	152	196
	PARA.		ENGLAND.		
	1909.	1908.	1907.	1909.	1908.
Stocks, January 31.....	1075	1245	965	180	850
Arrivals, February.....	3930	4250	4030	1165	1870
Aggregating.....	5005	5495	4995	1345	2720
Deliveries, February.....	3295	4130	4510	925	1355
Stocks, February 28.....	1710	1365	485	420	1365
World's visible supply, Jan. 31.....	4,675	5,089	3,014		
Pará receipts, July 1 to February 28.....	22,340	21,195	20,760		
Pará receipts of caucho, same dates.....	4,090	3,295	2,650		
Afloat from Pará to U. S., Feb. 28.....	2,000	657	634		
Afloat from Pará to Europe, Feb. 28.....	1,420	1,950	1,250		

ARRIVALS of rubber of all kinds at Pará from the beginning of the crop year to March 20 amounted to 28,770 tons, against 28,680 tons to the end of March, 1908; 29,390 tons to March 31, 1907; and 28,020 tons to March 31, 1906.

### NEW YORK PRICES FOR FEBRUARY (NEW RUBBER).

	1909.	1908.	1907.
Upriver, fine.....	1.20@1.26	.66@.76	1.19@1.23
Upriver, coarse.....	.91@.96	.48@.56	.95@.98
Islands, fine.....	1.15@1.20	.65@.74	1.17@1.19
Islands, coarse.....	.57@.61	.41@.46	.69@.72
Cametá.....	.62@.65	.42@.46	.71@.73

In regard to the financial situation, Albert B. Beers (broker in crude rubber and commercial paper, No. 68 William street, New York) advises as follows: "There has been a good demand for commercial paper of the rubber trade during March with not much available. Rates have ruled at 4½@5 per cent. for the best names, and 5@5½ per cent. for those not so well known."

### Antwerp.

#### RUBBER STATISTICS FOR FEBRUARY.

	1909.	1908.	1907.	1906.	1905.
DETAILS.					
Stocks, Jan. 31.....	597,777	1,260,009	618,650	518,695	299,348
Arrivals in February.....	309,011	277,443	598,332	414,899	621,946
Congo sorts.....	184,360	255,000	549,863	338,905	496,318
Other sorts.....	115,651	22,443	48,469	75,994	125,628
Aggregating.....	897,788	1,537,452	1,216,982	933,594	921,204
Sales in February.....	566,355	630,348	613,121	318,906	363,894
Stocks, February 28.....	331,433	907,104	603,861	614,688	557,400
Arrivals since Jan. 1.....	583,966	825,411	916,024	1,019,928	947,027
Congo sorts.....	370,549	759,451	792,669	753,518	736,027
Other sorts.....	213,417	65,960	123,355	266,410	211,000
Sales since Jan. 1.....	848,268	925,201	970,347	1,140,427	930,988

### Rubber Scrap Prices.

LATE New York quotations—prices paid by consumers for car-load lots, per pound—show practically no change since last month:

Old rubber boots and shoes—domestic.....	8½@ 8¾
Old rubber boots and shoes—foreign.....	8½@ 8¾
Pneumatic bicycle tires.....	5½@ 6
Automobile tires.....	5½@ 6
Solid rubber wagon and carriage tires.....	7 @ 7½
White trimmed rubber.....	9½@10
Heavy black rubber.....	5 @ 5½
Air brake hose.....	3½@ 3¾
Garden hose.....	2 @ 2½
Fire and large hose.....	2¾@ 3
Matting.....	1¼@ 1½

**Antwerp.****RUBBER ARRIVALS FROM THE CONGO.**MARCH 2.—By the steamer *Albertville*:

Bunge & Co.	(Société Générale Africaine) kilos	64,000
Do	(Comptoir Commercial Congolais)	8,200
Do	(Société Anversoise)	19,100
Do	(Comité Social Katanga)	4,800
Do	(Chemins de fer Grand Lac)	2,700
Do	(Cie. du Kasai)	108,300
Société Coloniale Anversoise	(Cie. du Lomami)	5,700
Do		4,900
Do	(Société Ikelamba)	3,400
Société Générale de Commerce	(Lobay)	9,300
L. & W. Van de Velde		4,000
M. S. Cols.		800
		235,400

**Liverpool.**

WILLIAM WRIGHT &amp; Co. report [March 1]:

*Fine Pará.*—In spite of continued heavy receipts there has been a good demand, and prices during the first half of the month advanced. Towards the close, however, a quieter feeling prevailed, but there is a strong undercurrent of strength, and a further comparatively slight reaction would induce active buying. America has again taken 120 tons from this market. Closing value, up river spot 5s. 3d. [= \$1.27 2/3]; islands, 5s. 2 1/2d. [= \$1.26].

**Rubber Receipts at Manaus.**

DURING February and eight months of the crop season for three years [courtesy of Messrs. Scholz &amp; Co.]:

	FEBRUARY.			FEBRUARY.		
	1909.	1908.	1907.	1908-'09.	1907-'08.	1906-'07.
Rio Puris-Acre.....	1,535	1,693	1,092	7,333	7,191	5,224
Rio Madeira.....	330	482	539	2,485	2,308	2,663
Rio Juruá.....	511	873	424	3,108	3,044	2,691
Rio Javary-Iquitos.....	342	165	261	4,156	2,365	2,519
Rio Solimões.....	106	88	121	868	1,037	781
Rio Negro.....	119	124	85	390	374	457
Total.....	2,943	3,425	2,526	16,340	16,319	14,335
Caucho.....	1,015	1,052	838	4,072	3,580	2,727
Total.....	3,958	4,477	3,364	20,412	19,899	17,062

**London.**

MARCH 12.—At to-day's auctions the offering of Plantation rubber from Ceylon and Malaya, the quantity sold, and the average price, compared with the corresponding sale one year ago, according to Gow, Wilson & Stanton, Limited, as follows:

	1908	1909
Number of packages offered.....	651	1,935
Number of packages sold.....	480	1,644
Average price, Plantation.....	3s. 3d.	5s. 5d.
Price of hard fine Pará.....	3s. 1 1/2d.	5s. 3d.

At the auction to-day the larger supplies met with good all around competition, and most of them were sold in the room at prices showing only a small decline of up to here and there one penny per pound from prices a fortnight ago. Parcels of crepe sold up to 5s. 6 1/2d. [= \$1.34 3/4] and worms at 5s. 6d.

Several lots of "rambong" (*Ficus* rubber) found buyers—16 cases from Sumatra at 5s. [= \$1.21 3/4].

Exports of plantation this year from Singapore (to February 12) and from Penang (to January 24) aggregated 534,594 pounds, against 288,982 pounds for the same dates last year.

**PARA RUBBER VIA EUROPE.**

	POUNDS.
FEB. 23.—By the <i>Baltic</i> =Liverpool:	
General Rubber Co. (Fine).....	157,000
Livesey & Co. (Coarse).....	7,000
MARCH 1.—By the <i>Lucania</i> =Liverpool:	
General Rubber Co. (Fine).....	22,500
MARCH 1.—By the <i>Pretoria</i> =Hamburg:	
W. L. Gough & Co. (Fine).....	12,000
Poel & Arnold (Fine).....	9,000
MARCH 4.—By the <i>Oruba</i> =Mollendo:	
New York Commer. Co. (Fine).....	4,000
A. D. Hitch & Co. (Fine).....	3,500
MARCH 4.—By the <i>Cecile</i> =Liverpool:	
General Rubber Co. (Fine).....	22,500
Livesey & Co. (Coarse).....	11,500
MARCH 8.—By the <i>Pennsylvania</i> =Hamburg:	
Rubber Trading Co. (Coarse).....	13,500
Poel & Arnold (Fine).....	16,000
MARCH 8.—By the <i>Celtic</i> =Liverpool:	
General Rubber Co. (Fine).....	27,000
General Rubber Co. (Coarse).....	11,500
Livesey & Co. (Coarse).....	15,000

MARCH 11.—By the *Victorian*=Liverpool:

General Rubber Co. (Fine).....

MARCH 15.—By the *St. Paul*=London:

Poel &amp; Arnold (Coarse).....

MARCH 16.—By the *Bovic*=Liverpool:

Livesey &amp; Co. (Fine).....

Livesey &amp; Co. (Coarse).....

MARCH 20.—By the *Louisiana*=Havre:

New York Commercial Co. (Cauch).....

MARCH 22.—By the *Compania*=Liverpool:

General Rubber Co. (Coarse).....

Livesey &amp; Co. (Coarse).....

MARCH 22.—By the *Baltic*=Liverpool:

Ed. Reeks &amp; Co. (Fine).....

Ed. Reeks &amp; Co. (Coarse).....

Poel &amp; Arnold (Fine).....

**OTHER NEW YORK ARRIVALS.****CENTRALS.**

[\*This sign, in connection with imports of Centrals, denotes Guayule rubber.]

Ceylon exports to February 15 were 129,850 pounds, against 93,207 for same time last year.

**CEYLON RUBBER CROP CONTRACTS.**

THE extent to which the rubber growing interest in the Far East is becoming established upon a settled basis is indicated by the forward sale of rubber on contract. The *Times of Ceylon* of recent date mentioned that 16 plantation companies in Ceylon and Malaya had disposed of their crops for the current year to local merchants, on contract. The amount of rubber thus sold was estimated at 740,000 pounds, of the value of £130,000 [= \$632,645]. The price named for crepe and biscuits was 3.70 rupees [= \$1.20, gold] per pound. Ceylon planters deliver to merchants at Colombo for this price. The *Ceylon Observer* comments: "The rubber crop contracts for 1909 point to a firm rubber market throughout this year. This is good news for growers everywhere." The companies named in this connection are not yet among the larger producers, but have won a good position in the industry. It is estimated that from 70 to 80 per cent. of their production will be of a quality to fetch the contract price for "good grades."

**IMPORTS FROM PARA AT NEW YORK.**

[The Figures Indicate Weights in Pounds.]

MARCH 1.—By the steamer *Boniface*, from Manáos and Pará:

IMPORTERS.	Fine.	Medium.	Coarse.	Caucho.	Total.
A. T. Morse & Co.	481,100	94,800	104,200	87,800	767,900
New York Commercial Co.	171,700	45,700	86,000	303,200	606,600
Poel & Arnold	295,800	54,600	192,300	100,100	642,800
Hagemeyer & Brunn	32,500	300	99,000		131,800
General Rubber Co.	3,800	2,000	3,500	34,100	43,400
C. P. Santos	14,900	4,100	29,600	2,500	51,100
G. Amsinck & Co.	37,000	5,000	1,200	7,500	50,700
Ed. Reeks & Co.	8,600		5,800	2,000	16,400
Thomsen & Co.	1,400		700		2,100
Total	1,046,800	206,500	522,300	537,200	2,312,800

MARCH 11.—By the steamer *Bernard*, from Manáos and Pará:

Poel & Arnold	120,400	29,800	32,000	40,400	222,600
A. T. Morse & Co.	84,700	6,100	22,100	35,100	148,000
New York Commercial Co.	22,500	9,300	72,300	28,900	133,000
Hagemeyer & Brunn	47,900	2,000	63,700		113,600
C. P. Santos	33,900	3,900	4,200		42,000
Ed. Reeks & Co.	4,700	700	17,800		23,200
General Rubber Co.	800	700	300	1,000	2,800
Total	314,900	52,500	212,400	105,400	685,200

MARCH 15.—By the steamer *Maranhense*, from Manáos and Pará:

Poel & Arnold	235,700	1,300	108,100	153,800	498,900
New York Commercial Co.	129,600	31,000	54,000	139,600	354,200
A. T. Morse & Co.	161,800	30,100	66,400	87,100	345,400
General Rubber Co.	6,200	2,800	4,800	60,800	74,600
Hagemeyer & Brunn	29,700	1,100	62,700		93,500
C. P. Santos	46,400	3,900	4,800	3,900	59,000
Ed. Reeks & Co.	8,100	900	3,600	21,100	33,700
G. Amsinck & Co.			20,400	11,000	31,400
Total	608,500	71,300	324,800	477,300	1,481,900

MARCH 25.—By the steamer *Horatio*, from Manáos and Pará:

A. T. Morse & Co.	312,600	55,500	66,800	116,500	551,400
Poel & Arnold	132,600	14,900	54,100	46,700	248,300
New York Commercial Co.	45,800	27,200	28,700	106,800	208,500
G. Amsinck & Co.			94,200	26,400	120,600
Hagemeyer & Brunn	16,800	1,800	44,900		63,500
General Rubber Co.			40,700	1,600	42,300
C. P. Santos	5,000	2,200	3,200	17,200	27,600
Ed. Reeks & Co.			13,200		13,200
Total	512,800	101,600	345,800	315,200	1,275,400

FEB. 20.—By the *Merida*=Vera Cruz:

H. Marquardt &amp; Co.

American Trading Co.

For Havre

A. Klepstein &amp; Co.

FEB. 23.—By the *Cienfuegos*=Tampico:

Continental-Mexican Rub. Co.

New York Commercial Co.

Ed. Maurer

Poel &amp; Arnold

FEB. 23.—By the *Byron*=Bahia:

Poel &amp; Arnold

FEB. 24.—By the *El Alba*=Galveston:

Continental-Mexican Rub. Co.

For Canada

FEB. 24.—By the *Prinz Willem*=Colon:

G. Amsinck &amp; Co.

Herzel, Feltman Co.

Brandon &amp; Bros.

FEB. 25.—By the *Saxon Prince*=Bahia:

A. Hirsch &amp; Co.

J. H. Rossback &amp; Bros.

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No. 17. Particularly adapted to softening material for tubing machine. Almost universally used for waterproofing wire.

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Largest Producers of Guayule Rubber, Operating Nine Factories.

FEB. 25.—By <i>El Mar</i> =Galveston:		POUNDS.		W. R. Grace & Co.		1,000		POUNDS.		MARCH 17.—By the <i>Samland</i> =Antwerp:		POUNDS.	
Continental-Mexican Rubber Co.		*112,000		Demarest Bros.		1,000		31,500		Poel & Arnold.		56,000	
FEB. 26.—By <i>El Dorado</i> =New Orleans:				MARCH 15.—By the <i>St. Paul</i> =London:						George A. Alden & Co.		50,000	
Eggers & Heinlein.		2,500		Poel & Arnold.		7,000				A. T. Morse & Co.		35,000	
General Export & Com. Co.		1,000		MARCH 16.—By the <i>Hugin</i> =Tampico:						Joseph Cantor.		5,000	
G. Amsinck & Co.		1,000		Edward Maurer.		*56,000				Rubber Trading Co.		4,000	
FEB. 27.—By the <i>Segismund</i> =Columbia:		4,500		Poel & Arnold.		*55,000				MARCH 19.—By the <i>Waldersee</i> =Hamburg:		150,000	
Maitland, Coppel & Co.		10,000		Graham Hinkley Co.		2,000				Livesey & Co.		18,000	
Kunhardt & Co.		2,000		For Akron, Ohio.		*75,000		*188,000		Poel & Arnold.		11,500	
A. Held.		1,000		MARCH 17.—By the <i>Sarnia</i> =Honduras:		1,500				W. L. Gough Co.		5,000	
FEB. 27.—By the <i>Advance</i> =Colon:		13,000		H. Marquardt & Co.		1,500				General Rubber Co.		4,500	
G. Amsinck & Co.		5,500		A. Rosenthal Son.		1,000				MARCH 19.—By the <i>Maris</i> =Lisbon:		39,000	
Jose Julia & Co.		4,500		Suzarte & Whitney.		1,000				General Rubber Co.		56,000	
Wessels, Kulekamp Co.		2,000		Brandon & Bros.		1,000				MARCH 20.—By the <i>Louisane</i> =Havre:			
Roldau & Van Sickle.		1,500		MARCH 18.—By the <i>Tagus</i> =Columbia:		7,000				Robinson & Co.		15,000	
Brandon & Bros.		1,500		A. Held.		1,500				MARCH 22.—By the <i>Baltic</i> =Liverpool:			
R. G. Barthold.		1,000		M. Blancha & Co.		1,000				Poel & Arnold.		100,000	
De Lima Cortessa Co.		1,000		MARCH 20.—By <i>El Siglo</i> =Galveston:		9,500				General Rubber Co.		30,000	
Piza, Nephews & Co.		1,000		For Canada.		*11,500				Rubber Trading Co.		7,000	
FEB. 27.—By the <i>Monterey</i> =Frontera:		16,000		MARCH 20.—By the <i>Merced</i> =Vera Cruz:		*11,500				Geo. A. Alden Co.		8,000	
Harburger & Stack.		7,000		H. Marquardt & Co.		1,500				MARCH 23.—By the <i>Chicago</i> =Havre:		145,000	
E. Steiger & Co.		7,000		Graham Hinkley & Co.		1,500				Robinson & Co.		11,500	
General Export & Com. Co.		5,500		E. Steiger & Co.		1,000		4,000		Livesey & Co.		23,000	
H. Marquardt & Co.		2,000		MARCH 20.—By the <i>Hawaiian</i> =Porto Mexico:		11,500							
E. N. Tibbals & Co.		1,500		George A. Alden & Co.									
Scholz & Marture.		1,000		MARCH 22.—By the <i>Bayamo</i> =Tampico:									
Isaac Kubie & Co.		1,000		Edward Maurer.		*145,000							
MARCH 1.—By the <i>Pretoria</i> =Hamburg:		25,000		New York Commercial Co.		*110,000							
Rubber Trading Co.		11,000		Poel & Arnold.		9,000							
MARCH 2.—By the <i>Yumuri</i> =Tampico:				For Akron, etc.		*55,000		*310,000					
Edward Maurer.		*100,000		MARCH 22.—By the <i>El Sud</i> =Galveston:		*165,000							
Poel & Arnold.		45,000		Continental-Mexican Rubber Co.									
For Akron, Ohio.		*45,000		MARCH 23.—By the <i>Advance</i> =Colon:									
MARCH 2.—By <i>El Sud</i> =Galveston:		*190,000		G. Amsinck & Co.		5,000							
Edward Maurer.		*22,500		Jose Julia & Co.		2,000							
For Canada.		*15,000		T. Sambrade & Co.		2,500							
MARCH 3.—By the <i>Alliance</i> =Colon:		*37,500		F. Lapeirda.		3,000							
G. Amsinck & Co.		4,000		Demarest Bros. Co.		1,500							
T. Saubrade & Co.		4,000		Silva Bussenus Co.		1,500							
L. Johnson & Co.		2,500		Wessels, Kulekamp Co.		1,500							
Simons, Elias & Co.		1,500		Mecke & Co.		1,000							
Demarest Bros. & Co.		1,500		American Trading Co.		1,000							
Henry Mann & Co.		2,000		Roldau & Van Sickle.		1,000							
Kunhardt & Co.		2,500		De Lima, Cortessa Co.		1,000							
A. M. Capens Sons.		3,000		Pablo Calvet Co.		1,000							
Roldau & Van Sickle.		1,000		Meyer Hecht.		1,000		23,000					
W. R. Grace & Co.		1,000		MARCH 24.—By <i>El Cid</i> =Galveston:		*325,000							
MARCH 5.—By <i>El Montic</i> =New Orleans:		23,000		Continental-Mexican Rubber Co.									
A. T. Morse & Co.		1,500		MARCH 25.—By the <i>Tennysen</i> =Bahia:									
K. Mandell & Co.		1,500		A. Hirsch & Co.		34,000							
Wessels, Kulekamp Co.		1,000		Poel & Arnold.		11,000							
MARCH 6.—By the <i>Mexico</i> =Frontera:		4,000		New York Commercial Co.		11,500							
Harburger & Stack.		10,000		Rossback & Bros.		12,000							
E. Steiger & Co.		4,500											
Strube & Utze.		2,500											
E. N. Tibbals & Co.		2,000											
H. Marquardt & Co.		1,000											
General Export & Com. Co.		1,500											
MARCH 8.—By the <i>Celtic</i> =Liverpool:		21,500											
Poel & Arnold.		30,000											
MARCH 8.—By the <i>Vigilancia</i> =Tampico:													
Poel & Arnold.		*55,000											
New York Commercial Co.		*34,000											
Cont. & Mexican Co.		*35,000											
Edward Maurer.		*35,000											
For Akron, Ohio.		*60,000											
MARCH 8.—By the <i>Victoria</i> =Hamburg:		*219,000											
W. L. Gough Co.		8,000											
MARCH 8.—By the <i>Monterey</i> =New Orleans:													
Central American Trading Co.		11,500											
MARCH 9.—By the <i>Colon</i> =Colon:													
G. Amsinck & Co.		3,500											
Mecke & Co.		2,000											
Andreas & Co.		1,500											
Hirzel, Feltman & Co.		1,000											
Fidanque Bros.		1,000											
MARCH 10.—By the <i>Prins Joachim</i> =Columbia:		9,000											
A. Rosenthal Sons.		3,500											
Pablo Calvet & Co.		2,500											
Mecke & Co.		2,500											
G. Amsinck & Co.		1,500											
M. Blancha & Co.		1,500											
Brandon & Bros.		1,000											
A. Santos & Co.		1,000											
MARCH 12.—By the <i>Prins Frederick</i> =Columbia:		13,500											
Maitland, Coppel & Co.		9,000											
G. Amsinck & Co.		1,000											
Kunhardt & Co.		3,000											
MARCH 12.—By <i>El Alba</i> =Galveston:		13,000											
Ed. Maurer.		*11,000											
MARCH 13.—By the <i>Esperanza</i> =Frontera:													
Harburger & Stack.		11,500											
General Export & Commis. Co.		3,500											
E. Steiger & Co.		2,000											
H. Marquardt & Co.		2,500											
Graham Hinkley Co.		2,000											
MARCH 13.—By the <i>Voltaire</i> =Bahia:		21,500											
J. H. Rossback & Bros.		35,000											
Poel & Arnold.		22,500											
New York Commercial Co.		11,500											
A. D. Hitch & Co.		4,500											
A. Hirsch & Co.		2,000											
MARCH 15.—By the <i>Panama</i> =Colon:		75,500											
G. Amsinck & Co.		8,000											
Piza Nephews Co.		6,000											
Brandon & Bros.		4,500											
L. Johnson & Co.		4,000											
Mecke & Co.		1,500											
Luzarte & Whitney.		1,500											
American Trading Co.		1,500											
Eggers & Heinlein.		1,500											
Meyer Hecht.		1,000											

FEB. 25.—By the <i>Caroline</i> =Havre:		POUNDS.		AFRICAN.		POUNDS.		FEB. 25.—By the <i>Vaderland</i> =Antwerp:		POUNDS.		FEB. 25.—By the <i>Sikh</i> =Singapore:		POUNDS.	
Poel & Arnold.		33,500		FEB. 23.—By the <i>Baltic</i> =Liverpool:		37,500		W. L. Gough Co.		150,000		Heabler & Co.		280,000	
George A. Alden & Co.		4,000		General Rubber Co.		11,500		Heabler & Co.		18,000		George A. Alden & Co.		460,000	
Poel & Arnold.		9,000		Poel & Arnold.		11,000		Joseph Cantor.		6,500		MARCH 11.—By the <i>Lennox</i> =Singapore:			
George A. Alden & Co.		11,000		Livesey & Co.		6,000		Poel & Arnold.		22,500		Robinson & Co.		37,500	
Jos. Cantor.		11,000		A. T. Morse & Co.		7,000		MARCH 15.—By the <i>Langdale</i> =Columbia:		*8,000		A. T. Morse & Co.		*10,000	
A. T. Morse & Co.		7,000		Robinson & Co.		7,000		MARCH 17.—By the <i>Frantenfels</i> =Columbia:		*5,000		MARCH 23.—By the <i>Minneapolis</i> =London:			
FEB. 25.—By the <i>Vaderland</i> =Antwerp:				FEB. 25.—By the <i>Vaderland</i> =Antwerp:				Livesey & Co.		*1,000		Poel & Arnold.		*3,500	
Poel & Arnold.		12,000		W. L. Gough Co.		9,000		21,000		20,500		Livesey & Co.		14,500	
W. L. Gough Co.		9,000		MARCH 1.—By the <i>Lucania</i> =Liverpool:											
MARCH 1.—By the <i>Lucania</i> =Liverpool:				George A. Alden & Co.		11,500									
George A. Alden & Co.		11,500		Livesey & Co.		9,000									
MARCH 1.—By the <i>Pretoria</i> =Hamburg:				MARCH 1.—By the <i>Pretoria</i> =Hamburg:											
Poel & Arnold.		84,000		General Rubber Co.		25,000									
General Rubber Co.		25,000		A. T. Morse & Co.		22,500									
A. T. Morse & Co.		22,500		Livesey & Co.		10,000									
MARCH 2.—By the <i>Kroonland</i> =Antwerp:				Rubber Trading Co.		8,000		140,500							
W. H. Stiles & Co.		13,500		MARCH 2.—By the <i>Kroonland</i> =Antwerp:											
MARCH 4.—By the <i>Majestic</i> =Bordeaux:				General Rubber Co.		35,000									
MARCH 4.—By the <i>Cervic</i> =Liverpool:				Poel & Arnold.		13,500									
Poel & Arnold.		13,500		George A. Alden & Co.		11,000									
George A. Alden & Co.		11,000		Raw Br. Co.		5,500		30,000							
MARCH 4.—By the <i>Hudson</i> =Bordeaux:				MARCH 4.—By the <i>Hudson</i> =Bordeaux:											
George A. Alden & Co.		22,500		Livesey & Co.		13,500		36,000							
MARCH 8.—By the <i>Pennsylvania</i> =Hamburg:				MARCH 8.—By the <i>Pennsylvania</i> =Hamburg:											
Livesey & Co.		27,000		George A. Alden & Co.		6,000		35,500							
MARCH 8.—By the <i>Celtic</i> =Liverpool:				Rubber Trading Co.		2,500									
General Rubber Co.		155,000		MARCH 8.—By the <i>Celtic</i> =Liverpool:											
Poel & Arnold.		79,000		General Rubber Co.		155,000									
Livesey & Co.		11,500		Poel & Arnold.		79,000									
Rubber Trading Co.		9,000		George A. Alden & Co.		88,000		342,500							
MARCH 8.—By the <i>Victoria</i> =Hamburg:				MARCH 8.—By the <i>Victoria</i> =Hamburg:											
Poel & Arnold.		15,000		Livesey & Co.		15,000									
Livesey & Co.		20,000</													



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## CUSTOM HOUSE STATISTICS.—FEBRUARY.

Imports:	Pounds.	Value.
India-rubber .....	10,024,825	\$7,977,339
Balata .....	6,670	2,474
Gutta-percha .....	716	225
Gutta-jelutong (Pontianak).....	1,200,501	46,321
<b>Total .....</b>	<b>11,232,712</b>	<b>\$8,026,359</b>
<b>Exports:</b>		
India-rubber .....	28,198	\$15,872
Balata .....	9,151	4,900
Reclaimed rubber .....	28,139	3,459
Rubber scrap imported .....	1,043,246	\$81,873

## Plantation Rubber from the Far East, 1908.

EXPORTS OF CEYLON GROWN RUBBER.  
[Compiled by the Ceylon Chamber of Commerce.]

	Pounds.		Pounds.
To Great Britain...	560,133	To Japan .....	70
To United States...	253,296		
To Germany .....	48,908	Total, 1908 .....	912,125
To Australia .....	39,097	Total, 1907 .....	556,080
To Belgium .....	5,655	Total, 1906 .....	327,661
To France .....	2,757	Total, 1905 .....	168,547
To Italy .....	1,127	Total, 1904 .....	77,212
To India .....	896	Total, 1903 .....	41,798
To Denmark .....	186		

EXPORTS FROM THE FEDERATED MALAY STATES.  
[Supplied by the Commissioner of Trade and Customs.]

States.	1906.	1907.	1908.
Perak .....	149,640	255,530	445,589
Selangor .....	681,040	1,198,751	1,011,399
Negri Sembilan .....	198,112	530,004	808,612
Pahang .....	a	a	a
<b>Total .....</b>	<b>1,028,792</b>	<b>1,984,285</b>	<b>3,165,600</b>

[a—The plantations in this state are not yet productive.]

## TOTAL EXPORTS FROM MALAYA.

[Including the produce of the Federated Malay States and some from neighboring territory.]

[Reported by BARLOW &amp; Co., Singapore.]

	Pounds.		Pounds.
To Great Britain...	3,026,568	To Australia .....	20,401
To other Europe..	310,402	To Ceylon .....	303,445
To United States..	400		
To Japan .....	10,210	Total .....	3,671,435
		1905.	1906.
From Singapore..pounds	180,533	719,133	1,446,417
From Penang .....	48,267	98,636	642,668
<b>Total .....</b>	<b>228,800</b>	<b>817,769</b>	<b>2,089,085</b>

## SUMMARY.

The total exports of plantation rubber from Ceylon and Malaya for four years have been:

	1905.	1906.	1907.	1908.
Pounds .....	397,347	1,145,430	2,645,165	4,583,560

The 1908 export was equal to 2,078,644 kilos (2,078 metric tons), which figure may be of interest for comparison with Brazilian and some other rubber statistics. The export of the whole Amazon valley was smaller in the year 1858.

## PLANTATION YIELDS (IN POUNDS.)

	1907.	1908.
<b>Vallambrosa Rubber Co.:</b>		
Eleven months ended February 28.....	204,389	257,856
<b>Highlands and Lowlands Pará Rubber Co.:</b>		
February .....	12,125	24,471
<b>Lanadron Rubber Estates:</b>		
January-February .....	24,026	35,300
<b>Anglo-Malay Rubber Co.:</b>		
January-February .....	47,629	68,728
<b>Ledbury Rubber Co.:</b>		
February .....		4,756
<b>Kuala Lumpur Rubber Co.:</b>		
Eight months ended February 28.....		125,988
<b>Linggi Plantations:</b>		
February .....		35,000
<b>Consolidated Malay Rubber Estates:</b>		
February .....	4,397	14,519
<b>Bukit Rajah Rubber Co.:</b>		
February .....	17,240	10,546
Eleven months ended February 28.....	146,348	176,588
<b>Sumatra Pará Rubber Plantations:</b>		
February .....		4,950
<b>Malacca Rubber Plantations:</b>		
February .....		11,000
<b>Perak Rubber Plantations:</b>		
Ten months ending January 31.....	31,715	58,534

## TOTAL YIELDS.

	1907.	1908.
Highlands and Lowlands Pará Rubber Co...	193,505	222,287
Sevemban Estate Rubber Co.....	109,055	133,610



